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ORIGINAL DEPARTMENT.

LECTURE.

CHRONIC FOLLICULAR ENTERITIS.

Delivered at the Hospital of the University of Pennsylvania, May 1st, 1880,

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Reported by WM. H. MORRISON, M.D.

This lady's case is one of long standing. I bring her before you in connection with the case of the man who insisted that he had a snake in his stomach, in consequence of having from time to time passed membranous casts from his bowels. A case of obstinate dyspepsia with membranous enteritis. I told you I would have a few words to say in regard to these different types of chronic bowel trouble. I do not know that they could be gathered together under any one name, but I shall show you illustrative cases of each type, and so you will get an idea of them all.

Let us take, for instance, this lady; a case of chronic follicular enteritis. She is 56 years old. She has resided in the South, but there is no reason to suspect much malarial trouble. She has suffered severe reversals of fortune. She has always been of a nervous temperament, and this has been aggravated by the circumstances to which I have alluded. An indulgent husband, who has humored all her whims and done all he could for her, has gradually brought about a condition of excited nervous sensibility, which, at times, almost amounts to hysteria. She has now gained considerable control over herself. The menopause occurred at the age of fifty.

Two years and a half ago her general health began to fail, she lost flesh, grew pale and weak,

and had light attacks of catarrhal diarrhœa. This is quite a common history. There is a slow breaking down of the general health, gradually the power of resistance being reduced and the general health lowered; the system becomes so sensitive that after a little exposure to cold or damp, after eating some indigestible article of food, there will be a profuse secretion and a little diarrhœa. These attacks at first last only a few days and do not come very frequently, but as the system becomes more and more broken down the tendency becomes more and more marked, until there is produced a condition of almost constant diarrhœa. We find a progressive failure of general health, and with this the development of this morbid sensitiveness of the nervous system.

The diarrhœa takes different forms; sometimes it remains simply a flux; a discharge too frequent during the day, sometimes containing portions of food, but not containing mucus or bile or any evidence of ulceration. The diarrhœa may last in this way for many years, ten, fifteen, twenty years, without any evidence of intestinal ulceration. Simply a state of chronic catarrhal inflammation with enlargement of the follicles and weakness of the muscular coats of the bowel.

In other cases we find that ulceration ensues, and when these fresh attacks occur there are fresh crops of little ulcers. In such cases there will be a little discharge of blood in the stool and the microscope will show crystals of hæmatin and broken down corpuscles.

In other cases we do not have blood, but mucus. It is not necessary to have ulceration in order to have mucus, for we all know there may be a profuse discharge of mucus from the nose

or throat without any ulceration; but the follicles of the mucous membrane of the bowel are very prone to become enlarged, and if the disease is of long duration there is reason to think that small ulcers have formed.

In some cases the patients pass plugs of false membrane. They will tell you that they occasionally pass something like a skin. What our other patient thought was a snake was one of these membranous flakes. You see in these bottles specimens of these plugs. Perhaps most commonly they are in the form of casts of the intestine. I have seen them fifteen inches in length and large enough to be put over my thumb. More frequently they are not so large as that. In other cases they are solid plugs. I have now a case under treatment in which solid plugs are passed which are about three-sixteenths of an inch in diameter and three or four inches long. I know of no portion of the bowel from which they could come except the vermiform appendix.

In these cases of membranous enteritis there must be some spot of the bowel where the follicles are enlarged and are secreting a thick, glutinous material, which slowly undergoes a low degree of organization. I have had sections of these made, and I have found them to be fibro cellular in character, with blood vessels passing into them, so that Dr. Formad has been able to trace newly formed vessels passing from the intestinal loops into these plugs.

In all these cases the general health fails, the patient loses flesh, becomes anæmic, and there is a marked loss of tone, so that the patient becomes excessively sensitive. This condition is nearly always associated with a high degree of a nervous element, so much so that I have seen intense spinal tenderness, exaggerated reflex excitability, depression of spirits, hysterical attacks, and attacks almost epileptiform in their nature, in these cases of long standing bowel trouble, particularly when there has been ulceration or the formation of this membrane.

To return to our patient. In this case her health had become thoroughly broken down by these attacks of diarrhoea, which at last became chronic. With this there was evidence of ulceration, I think, of the lower bowel. There was tenesmus, the passage of blood, mucus and occasionally membranes.

There has been here the most marked evidence of relapses, which have been brought on from time to time by the most trifling causes, and we cannot treat these cases with any hope of success until we grasp fast hold of this idea.

This is not a chronic disease whose lesions are incurable, but it is a condition of the system in which the local lesion is unable to get well, because, from time to time, by the most trifling causes, fresh attacks are produced, which attacks make the patient weak, increase the local lesion and put the patient back. The degree to which this sensitiveness becomes developed is almost inconceivable. I have frequently seen such patients so sensitive that they could not put their bare foot or leg outside of bed in the morning and keep it there a minute without immediately having sharp pain in the abdomen and a fresh attack of diarrhoea; but if they put on their stockings and drawers before getting up, they will escape the diarrhoea. I have seen the same diarrhoea produced by the patient passing from a temperature of 70° to one of 60°. I have met with a score of cases which I was not able to cure until I got down to these minute details of practical life; and until you grasp this truth you will never get your patient well. No drug, no diet will alone cure these patients. You must associate with it an attention to details the most minute, the most laborious, and the most troublesome that I have ever met with.

These patients generally go the rounds of all the doctors in town. They go to one, get a little better, but soon a fresh attack comes, and they are as bad as ever. I began to treat this patient in the same half-hearted way. She got better, and then worse. I tried again, with the same result. I then told her that she would have to come to the hospital. There is no use dallying with these patients, for unless you begin and treat them thoroughly and radically you do them no good, and you lose credit.

She is now better than she was before she came into the hospital, but the treatment has been about the same as it was before she came, except that there has been more attention paid to general hygiene and the avoidance of disturbing causes. What is true of this case is true of all this sort of cases, and if you do not adopt this principle of treatment now, you will learn it by years of failure and worry over these patients.

Now as to the treatment: the condition being a complex one, in which there is loss of tone and power of the skin and of the nervous system, a state of muscular debility, and this condition of chronic inflammation of the mucous lining of the gastro-intestinal canal, our treatment must be addressed to the relief of these elements.

In the first place, as you will have gathered

from what I have said, I consider rest, seclusion and good hygiene as the basis of all successful treatment. Such patients must be kept in bed, either continuously or the greater part of the time, and allowed to get up for exercise under proper restrictions, on good days, at a certain period of the day, and for a definite length of time. Secondly. Here, as in the treatment of all chronic diseases, you must try to restore the tone of the skin. The more I labor to cure chronic diseases of the mucous membrane, the more am I impressed with the dependence of the mucous membrane of the gastro-intestinal canal, the internal skin, upon the external skin. Therefore, in these cases we use regular frictions, sponge bathing or inunctions, as we think best.

In regard to internal treatment: here, as in all mucous affections, diet is the most important element. It was only to day that a man brought his son to me, in the last extremity, worn to a shadow, and so exhausted that his recovery is problematical, with chronic intestinal inflammation, ulcerative in its character. He had received excellent medicinal treatment, but his diet had been entirely neglected. He had received half a grain each of nitrate of silver and opium, three times a day, with broiled fish for breakfast, and as many apples during the day as he wished to eat. There is absolutely no use of medicinal treatment in these cases, unless it is associated with a thoroughly correct diet. This should consist of such things as lean meat, scraped, stale bread, soft-boiled eggs; some prefer milk, buttermilk or skim-milk, others, the farinaceæ, as arrow-root, granum, or some of the other prepared starches. There is another preparation which often does exceedingly well; that is a mixture of oil and milk. The old-fashioned way was to take one-half a pound of mutton suet, put in one quart of milk, and boil to a pint, with constant stirring. So much of the suet as rose to the top was skimmed off and taken warm. This can often be digested where cod-liver oil cannot be. It is, perhaps, an old woman's remedy, but I have known persons with chronic enteritis cure themselves by taking it for a long time.

This item of food in chronic bowel troubles should be based upon the following principles: First, the food should be given at short intervals and in small quantities at a time; secondly, it should be of such a character as experience shows that the patient can perfectly digest.

We then come to medicinal treatment. We should attempt, in the first place, to allay the irritation of the mucous membrane. In many in-

stances, as here, we obtain much better results from the injection of nitrate silver into the colon than from drugs by the mouth. In many of these cases the disease must be very low down in the sigmoid flexure, for injections of half a pint of thin starch-water, containing a small quantity of nitrate of silver, will produce a palpable effect. Here, weak injections will often do great good, and I warn you against beginning with strong injections. My own rule is to begin with one-fourth of a grain of nitrate of silver to the ounce, and slowly increase it until I reach the tolerance of the bowel, which is different in each case. When there is evidence that the upper bowel is affected you may give, by the mouth, nitrate of silver, guarded with a little opium, associated with the extract of *nux vomica*.

I found at the last examination, that although the men were well prepared on all the subjects, yet some of them could not write prescriptions, because they had had no practical instruction in this branch. I propose, therefore, to write prescriptions on the blackboard, in order that you may become familiar with the proper combination of drugs and the proportioning of doses; but I beg that you will not copy them, for I do not believe that one man's prescriptions are good for another man's case.

If I wished to give nitrate of silver in this case I should combine it as follows:—

R. Argenti nitratis,
Pulv. opii,
Ex. nucis vomicæ, āā gr. v.
M. et. ft. pill. No. xxx.

Sig.—One after meals.

The nitrate of silver may be given until gr. xxx have been taken.

Another good remedy, and one which I have used with success with this patient, is small doses of the sulphate of zinc, gr. $\frac{1}{4}$ to $\frac{1}{2}$.

There is often acidity in these cases, with heartburn, and creasote associated with an alkali is often a valuable combination in the treatment of these chronic bowel troubles.

R. Creasoti, gtt viij
Bismuthi subnitratis,
Cretæ preparatæ, āā ʒj
Acaciæ, q. s.
Tinct. cardamomi comp., f. ʒ ss
Aquæ, q. s. ad t. ʒ iv.
Ft. mist.

Sig.—Dessertspoonful three or four times a day, in water.

I leave sugar out of these prescriptions. With this I should give a little opium, according to the number of the stools, either the deodorized tincture or chlorodyne.

These are samples of the sort of drugs which,

joined with diet, hygiene, rest, and perhaps injections, will greatly relieve these cases; but I consider the most important treatment to be the general management of the case.

A word in regard to this exaggerated nervous sensibility. At one time it became so intense that I tried the application of the actual cautery over the solar plexus. This had an excellent effect over both her physical and moral condition. I told her that when she showed the same nervousness I should have to resort to the same treatment. This seems to have had a very soothing effect.

COMMUNICATIONS.

CONCERNING TWO CASES OF PERFORATION OF THE MEMBRANA TYMPANI FROM ASCARIS LUMBRICOIDES, WITH REMARKS UPON THE CURIOUS HABITS OF THIS HUMAN PARASITE.

BY CHAS. S. TURNBULL, M.D.,

Chief Assistant to the Aural Department at the Jefferson Medical College Hospital.

(Read before the Alumni Society of the Auxiliary Department of the University of Pennsylvania.)

While looking over the December number of the New York edition of the London *Lancet*, my attention was called to the report of a "Case of Perforation of the Membrana Tympani from *Ascaris Lumbricoides*," by Lewis W. Reynolds, M.R.C.S. ENG. I turned, and with mingled emotions of curiosity and skepticism commenced to read as follows:—

"On March 3d I was called to see a woman, aged thirty five, three or four months advanced in pregnancy. She was in a low nervous state, and had been suffering since Christmas from nausea and vomiting. About two weeks before she had vomited several round worms; and about the same time suffered severely from dyspnoea, and intense pain in the chest and abdomen. Shortly before my arrival she had vomited two, and three more discharged from the nostrils, her nose bleeding first for three hours. I prescribed four grains of santonine powder, to be taken at bedtime; after taking which four worms were passed per rectum, for the first time. The santonine was followed next morning by fifteen grains of compound scammony powder, when a great many more were passed per rectum. Three or four hours after taking the second powder, and having previously suffered all night from intense earache, a neighbor discovered a worm protruding from each ear and both ears bleeding; the same day three others came away from the ears, two from the left and one from the right. The following morning, March 5th, her husband drew another from the ear, and again on March 8th; this last was four inches long, with the diameter of a small goose-quill. A large number were also dis-

charged each day by the bowel, making in all seventy-four.

"On March 10th, and again on March 13th, my patient vomited a large quantity of dark blood, and complained at the same time of a feeling of tenderness in the abdomen, for which I gave demulcents.

"On March 17th, in the evening, I was called to see her, and found her perfectly insensible, having been so since midday; the temperature was below normal, but with a fairly good pulse; she was roused again about midnight. The attack appeared to me hysterical. From this time she has gradually improved in health, but has had occasional attacks of diarrhoea.

"May 12th. For the last few days blood has trickled from her ears and down her throat, which she coughs up. On examination with the auriscope, there is now, as there was in March, excoriation of either meatus, and a large perforation of both membrana tympani, but the sense of hearing is very little impaired.

"Remarks.—The history of this case appears at first almost incredible; but there can be no doubt the membranes were perforated by the passage of the ascarides. In addition to being vomited, some must have crawled up the oesophagus into the fauces, thence some found their way into the nasal passages, and others into the Eustachian tubes, perforating the tympanic membranes, and being discharged by the external auditory meatus."*

High Wycombe, Bucks.

I considered the character of the medical journal, nor did I forget the title of the gentleman who was responsible for the facts of the case, which I was disposed to consider as illustrative of one of those curious hysterical manifestations accompanying certain female diseases. I thought these parasites might have escaped from the body and have crept into the external auditory meatus, or have been placed there by the patient to deceive her medical attendant. I have removed roaches, bed-bugs, and other parasites, to say nothing of other curious foreign bodies, from the ears of hysterical patients; hence my reason for suspicion. As I approached the end of the first paragraph I paused to re-read, thinking I had made some mistake; but when I read "this last was four inches long, with the diameter of a small goose-quill," I came to a full stop. Continuing, and reading Dr. R's remarks upon the case, I mentally agreed with him in considering that "the history of this case appeared at first most incredible."

My first impulse was to write to the editor of some medical journal, and express my doubts as to the genuineness of such a novel case. Second thought, usually the best, decided me to write to Dr. R., and ask him if he was really in earnest, whether or not he would be responsible for the facts of the case as reported, and stated

* The London *Lancet*, New York, December, 1880.

that, in my opinion, such an auro-parasitic demonstration was a "physical impossibility." Fearing I would not hear in time to report before this Society, I wrote a second time to Dr. R., and his prompt reply speaks for itself:—

HIGH WYCOMBE, Bucks, England,
March 1st, 1881.

MY DEAR SIR—I beg to acknowledge receipt of your communication. The case as reported by myself in the *Lancet*, on Oct. 23d, 1880, is certainly remarkable. The parasites were round, with fine transverse marks, tapering at either end, four inches long, with a corresponding diameter, which I described somewhat vaguely as the size of a small goose quill; but they were very much the diameter of a large sized Eustachian catheter (perhaps rather larger); but then I must ask you to remember that this was in the dead, contracted state.

To my mind, considering the elastic nature of these parasites and their ability to lengthen out in squeezing through a small aperture, there is no reason to look on the case as a "PHYSICAL IMPOSSIBILITY." I regret now I did not examine the parasites microscopically, but am certain they were *ascaris lumbricoides*. Trusting this may convince you, believe me, my dear sir,

Yours truly,

LEWIS W. REYNOLDS.

P.S.—Since my case you may not have seen a similar case reported in the *Lancet*, on January 8th, 1880, by Dr. Dickson; but as it is in the small print and may not be republished in New York, I enclose the extract:—

Extract from the *Lancet*, January 8th, 1881.

ESCAPE OF WORMS BY THE EXTERNAL MEATUS.

To the Editor of the *Lancet*:—

SIR—A few weeks ago I saw a case reported in your journal, of rupture of both tympanic membranes by the common round worm, the worms making their escape, one by the right the other by the left external ear. I have had lately a somewhat similar case under my care, in which the right tympanum was ruptured, giving rise to a good deal of hemorrhage and slight deafness, the worms, three in number, escaping by the external meatus. Yours truly,

(Signed)

JNO. DICKSON, M.B.

Bedford, Hull, Dec. 14th, 1880.

March 2d. Since writing the above I have received your second letter. The following history may be of interest to you: three months previous to the passage of the worms my patient suffered from deep-seated pain and cracking sensation in the ears. This was relieved by a purulent discharge from the external meatus, and at the same time, a spitting up of a similar discharge. This had a very bad smell and a bad taste; she has had bleeding from the ears, at intervals, up to the present time. With the otoscope can be seen in the right ear an oval aperture, puckered edges, and stained dark, from the hemorrhage; a loud ticking watch can only be heard close to the ear; as regards the left ear, evidence of perforation is still present, but the edges are in closer approximation than in the other. A watch can be

heard half an inch off. I have not a specimen of the worms now, having thrown them away after keeping them some time. I must thank you for your courtesy in writing to me, and at the same time would be much obliged if you would inform me what conclusion you arrive at. Any further information I can give I will, with pleasure. Yours very sincerely,

LEWIS W. REYNOLDS.

CHAS. S. TURNBULL, M.D.

Feeling an unusual interest in the cases reported, I availed myself of the experience and ever ready assistance of Prof. Joseph Leidy, M.D., to whom I submitted the printed account and the correspondence thereon. He assured me that, although it was a unique case, he thought it quite possible, because of the wonderful power of the *ascaris lumbricoides* to insinuate and force itself into small apertures and narrow passages. He referred me to a post-mortem specimen* now in the museum of the Medical Department of the University of Pennsylvania, deposited by the late Prof. W. Gibson.

In the discussion which followed the narration of these cases, Prof. Andrew J. Parker, M.D., said, "the worm in question displays a marked tendency to creep into small apertures, occasionally finding its way into the gall duct, gall bladder, hepatic and pancreatic duct, giving rise to various lesions. It also passes along fistulous tracks to the bladder, spleen, kidneys, spinal cord. Again, it may find its way into the glottis, trachea, lungs, etc. It is also found in the contents of abscesses, or fistulae in the walls of the abdomen, having, no doubt, in some such instances, caused the trouble. Cases have been recorded where it has become fixed and strangulated in the eyes of buttons and similar objects, and this fact has suggested the administration of such articles in order to act as worm traps."

Dr. Harrison Allen said, "during my term of service in Washington, during the war, I remember seeing in the Patent Office a model of an apparatus for trapping lumbricoid worms. As I recall the model, it consisted of a tube, fashioned somewhat like a 'Planten gelatine capsule.' An opening was seen on the side, which was continuous with a perforation extending through the short diameter of the tube. A concealed spring occupied one end of the interior of the apparatus and was armed at one end with a number of sharp teeth. The outside of the model was provided with a small ring. A long string was tied to this ring. I inferred, from my inspection, that the instrument was used in the following man-

* A liver of a child, containing a number of long, round worms (*ascaris lumbricoides*), packed in the biliary ducts.

ner: The spring being set the apparatus was swallowed by the patient, the string hanging from the mouth. The worm, having thrust a portion of his body through the opening, caused the spring to recoil and the teeth of the trap to pierce the worm and entrap him; the string was then to be used in withdrawing the trap and worm. These are my impressions of an instrument not seen since 1863."

Other members of the Society expressed themselves as having either seen or heard of cases in which this worm had been trapped in the apertures of small foreign bodies (such as buttons, etc.), accidentally swallowed.

In looking up the literature pertaining to this parasitic worm, I first consulted my copy of "Cobbold's Parasites, etc."* (a volume which, by the way, I think ought to be in every physician's library), and there found much of unusual interest, even to those not interested in helminthology. Excellent articles will also be found in Meigs and Pepper's, Dewees' and Condie's works on Diseases of Children. I have quoted extensively from Cobbold, in order to better acquaint medical men with many facts which are not generally known, not only as pertaining to the habits of the *ascaris lumbricoides*, but also to the symptoms it produces, hoping, by so doing, to awaken interest in the subject.

The parasites of the human body are, as a rule, not sufficiently understood by the profession generally, and many alarming and varied morbid phenomena, as well as their fatal issues, are to be ascribed to the presence of some form of parasite which, either by direct or reflex irritation, misleads, or baffles the skill of the professional adviser.

Cobbold † says this common parasite *Ascaris lumbricoides*, "Linneus," was for a long while regarded as identical with the great lumbricoid of the horse, but the question has been finally settled by Schneider, who has shown the two to be quite distinct. The large lumbricoid found in the ox belongs to the human worm. Our large human helminth resembles the common earth worm in general appearance only. The males usually measure from four to six inches in length and the females ten to fourteen inches. Some have been reported up to eighteen inches in length. The body is smooth, fusiform, and elastic, and marked by numerous fine transverse rings. It is attenuated toward either extremity, the anterior end terminating in a prominently

three-lobed mouth. The tail is bluntly pointed. *Notwithstanding the advantage which the size of this entozoon affords us in the matter of observations and experiments, we are yet ignorant as to the precise mode in which the young gain access to the human body.* From what has been noticed respecting the growth of the *ascaris* of the dog and hog, we know that the worm requires but a short time to pass from the larval to the sexual state. The views of Hering, Mosler, Davaine, and others, who suppose that these worms are reared in a direct manner by swallowing the ova, is, as Lueckart observed, not yet proved. We are in full possession of the facts of larval development.

When these worms first gain access to the human body their size is quite insignificant. At the post-mortem of an imbecile Heller discovered eighteen young worms, ranging in size from about one-ninth to one-half an inch in length. The eggs of the *ascaris lumbricoides* have been kept alive by Dr Davaine for a period of more than five years. I have myself watched the development of their contents in fresh water, through all the stages of yolk-segmentation, up to the stage of an imperfectly organized, coiled, intra chorionic embryo, and have kept them in the latter condition for a period of three months.

In this connection I will only add, that if the present position of the question be such as I have here represented it to be, we see that Mosler was not far wrong when he suggested that contamination of the drinking water with the eggs out of privies is to be blamed as a source of infection. According to Heller, from whence I quote, Mosler actually demonstrated the presence of the eggs in water thus exposed. In like manner it becomes obvious that Davaine's practical remark (although it was based on the assumption of a direct infection by the eggs), that filtration will probably be sufficient to prevent infection, loses nothing of its hygienic value, Davaine holds that the comparative infrequency of this parasite in Paris is due to the free use of the filter. In London, though not uncommon, the worm rarely occurs in great numbers in one bearer. Heller states that these worms were found in 9.1 per cent. of post-mortems conducted at Dresden, in 12 per cent. at Erlangen, and in 17 per cent. at Kiel. He quotes Huss in stating that no one is free from this worm in Finland. Throughout India and the East they are extremely abundant, so also in the West Indies, Brazil, and in the Mauritius, in the low lands of Holland, and the lake districts of Sweden. The abundance of water is certainly not alone suffi-

* Parasites, a Treatise on the Entozoa of Man and Animals, etc. By T. Spencer Cobbold, M.D., F.R.S., F.L.S., etc., London, 1879.

† Loc. cit., p. 243.

cient to explain the frequency of the parasite, seeing that the most important factor is that which rests upon the uncivilized habits of a rural population. Krabbe and Finsen have testified to the fact that Iceland is the only country that is entirely free from *ascaris lumbricoides*. The number of worms present in any human bearer is usually small, varying, commonly, from six to eight. Cases in which scores or hundreds are found, are comparatively rare.

Küchenmeister mentions the case of one child who passed 103 examples, and of another child that harbored from 300 to 400 worms; Dr. Gilli gives a case where 510 were passed by a child, and Cruveilhier estimated that over 1000 existed in an idiot girl. Dr. Mackeith, by means of *santonine*, expelled from a little girl five and a half years of age 300 lumbrici, and Dr. C. Rose, by the use of the same drug, expelled 30 from a child but 15 months old. (Dr. Dewees says* he never saw worms in children under ten months old, and in only two instances at that age.)

The proper habitat of the lumbricus is the upper and middle part of the small intestine. From this situation it often wanders, and frequently gains access to the outer world, not only by the natural passages of the mouth, nostrils, and anus, but also, occasionally, in a more direct way by perforating the intestinal and abdominal walls. Many cases are on record where they have passed into the abdominal cavity; in other instances they have lodged themselves within the abdominal viscera and pulmonary organs. As regards the symptoms produced by lumbrici, these vary according to the situation they may occupy, modified by age and temperament. They give rise to colic, shooting abdominal pains, dyspnoea, nasal itching, nausea, vomiting, diarrhoea, epilepsy, aphonia, strabismus, mania, etc. Occasionally death supervenes suddenly."

"Meigs and Peppert† confess themselves inclined to believe, from facts stated by different authors, and from the history of two cases which occurred to M. Guersant, in 1841, at the Children's Hospital of Paris (*Biblioth. du Méd. Prat.* p. 680), that worms may in some instances cause a perforation independently of previous disease of the coats of the intestine. In one of these, two lumbrici were found engaged in an opening in the appendix vermiformis, half the bodies of the animals being in the appendix and half in the peritoneal sac; while in the other, an opening of the same kind as in the previous case

was found in the appendix, and though the three worms which were found lying in the abdominal cavity might have escaped through an ulcerated perforation of the colon, it is not the less true that the opening in the appendix presented the same characters exactly as in the first case, in which the animals were, as the author remarks, "taken in the act." In both instances the perforation in the intestine was at the extremity of that canal, and in the form of a narrow opening, of a conical shape; the membranes were smooth, thinned, and the edges of the orifice sloped off from within, outward; no trace of anterior ulceration was perceptible."

At the German Hospital, in a post-mortem which I made this winter, in the case of a patient who died suddenly during the initial stage of typhoid fever, I found several small lumbrici in the distended, but not inflamed, vermiform appendix, but the small intestines were full of good-sized worms, which I had no doubt hastened, if they did not cause, the death of my patient. Lumbrici no doubt do great damage in all cases of acute enteric disease, and especially typhoid fever.

I wish in this connection to report two cases of unusual interest which occurred at the German Hospital in this city, as they serve especially to show the reflex phenomena of parasitic gastro-intestinal irritation. Dr. J. Solis Cohen, my colleague, who preceded me in the usual term of service, told me that Sarah P., aged seventeen years, was admitted to the medical wards as a typhoid-fever patient. She had a temperature of 106°, and a pulse of 136. A fever mixture was ordered, and as the bowels had not been opened for several days, a brisk purge was also prescribed. This within a short time caused to be expelled an *ascaris lumbricoides*, about twelve inches in length. In less than an hour the pulse and temperature were normal.

Last January there was admitted to my wards a young German, who, to all appearances, had been suddenly attacked in the full vigor of manhood, and without any apparent cause, with symptoms of an acute meningitis, concerning which I did not feel entirely satisfied. Having been compelled to use the straight jacket I ordered a purge and the usual treatment for such a case.

On making my visit the next day I was surprised to find my patient, who I thought might, perhaps, be dead, standing by his bed, to which he had been carried the day before, ready to plead for immediate discharge. A short

* Dewees, "Dis. of Child.," p. 481.

† Diseases of Children. 4th Edition. Philadelphia. 1870. p. 8:5.

time after having administered the prescribed purge of calomel and jalap, the nurse informed me that a lumbricoid worm, about fourteen inches in length, had been vomited, with instant relief to all the alarming symptoms, *i. e.*, violent delirium, a high fever, bounding pulse, stertorous breathing, a temperature of 105°, complete insensibility, etc. Cobbold * mentions a large number of most remarkable cases of lumbricoid eccentricities, some of which I have referred to in brief, quoting from his extensive and unique bibliography, p. 250.

CASES.—Boy, 15 years of age. Death due to pressure on the windpipe by a worm lodged in the gullet.

Epilepsy, produced by two lumbrici and one tapeworm.

Lunacy for eight years, by a single lumbricus (cataleptic fits lasting two and three weeks at a time).

Two cases of amaurosis in young girls, caused by lumbrici. (I have frequently cured apparently grave cases of amaurosis in children by santonine. T.)

Fatal enteritis, by 200 worms.

Eight fatal perforations (the eighth occupying the cavity of the pleura).

Cases of irritation of genito-urinary organs. Occupying the biliary ducts and gall bladder.

Two perforations of the small intestine.

In abscess of abdominal parietes.

Expelled by a child who had swallowed the brass "eye" of a lady's dress; through the circular loop of this eye, used as a toy, the ascaris had partly thrust its body, become strangulated, and there perished.

Two lumbrici trapped in the eyes of buttons swallowed by the patient; and one worm, not content with a single strangulation, had succeeded in passing itself through two buttons.

In 1842, Mr. T. G. Stockbridge gave a similar case, in which he spoke of "hooks and eyes" as a new remedy or "worm trap" for lumbricus.

Other writers mention similar cases of mechanical expulsion of worms "by metallic buttons."

An open-topped thimble constituted another worm trap.

"Metallic suspender buttons" penetrated by lumbrici.

Two more cases of worms trapped, "with a dress hook attached."

Worms in the bladder simulating "stone."

Lumbrici causing pulmonary disease.

Discharged through male urethra.

* Loc. cit.

A large worm (lumbricus) in the windpipe, causing death.

Worms (lumbrici) evacuated at an ulcer in the groin.

Forty lumbrici cause fatal tetanus (traumatic) in a boy.

Lumbrici in the nose.

" " abscess of the liver.

" " stomach, causing dyspnœa.

" " pleura.

Lumbricus in the bubo of a woman.

Perforation of the stomach by lumbrici.

Lumbrici ejected from the nose and mouth, attended with hæmoptysis.

Escape of lumbrici from the navel of a child.

Lumbricus and tenia associated, with hæmoptysis.

Deaf and dumb child restored after discharge of eighty-seven lumbrici.

Stuttering occasioned by lumbrici, etc.

Ascaris lumbricus causing catalepsy and fits, lasting two or three weeks; cured by vomiting.

"Child *twenty months old*, extremely emaciated, abdomen enormously distended, and semi transparent; rapid recovery after discharge of ninety-six lumbricoides, from ten to six inches long (under use of pink-root infusion*)."†

"Cobbold states a most important fact of more than usual interest, when he mentions the presence of a *peculiar irritating vapor* which is given out by these lumbricoids, particularly when fresh. Several observers have noticed peculiar symptoms. Miram was attacked with sneezing, excessive secretion of tears, with swelling of the puncta lachrymalia, and Huber also experienced a troublesome itching of the hands and neck, after examining specimens of ascaris. In like manner I have myself had watery suffusion of the eyes; and in Bastian's case even spirit specimens produced irritation. The attacks of catarrh and asthma were so persistent and severe that they lasted for six weeks at a time. So sensitive was Bastian to the lumbricoid miasm, that he could not even put on a coat that he had worn during his investigations without experiencing fresh attacks of sneezing and other catarrhal symptoms. The attacks became periodical, occurring between five and six in the morning, being accompanied by dyspnœa and distressing spasmodic cough. Bastian, in short, was quite a martyr in the cause of nematode anatomy."

Küchenmeister‡ says, "*The worm (ascaris*

* Dewees, "Diseases of Children," p. 492.

† "Küchenmeister's Manual of Parasites, Sydenham Society's Translation, London, 1857.

lumbricoides) can never actually bore through the healthy intestine. For this it is rendered unfit by the structure of its head and its thin lips, which are certainly adapted for suction, but not for boring." He, too, mentions the peculiar "lumbricoid miasm," which seems to be secreted by the third and innermost layer of skin. Also that the parasite, even in immense numbers, causes no annoyance to its host unless disturbed by irritating articles of diet, or medicines given for the purpose of expelling the worms."

There is no doubt, in my mind, but that this peculiar "irritating lumbricoid miasm or vapor" causes local as well as reflex irritation, and in the stomach, as if by a wise provision of nature, acts as an emetic, since the majority of worms are expelled, *per orem*. Santonine, to be given at short intervals, is recommended by all authorities, who likewise insist upon purgatives after fasting, and Küchenmeister extols the santionate of soda and castor oil.

The notes of the following case were kindly handed to me by Dr. Wm. H. Bennett, of this city. The worm in this case no doubt made its escape through the membrana-tympani, in which no signs of a perforation could be found. The "few days" intervening were quite enough to obliterate the small opening made by the dilating process of the parasite, as well as remove all symptoms of inflammation.

"A. S., a healthy girl, was, during the first half of her eighth year, subject to occasional slight attacks of earache. When eight and a half years of age she had an attack of scarlet fever, which was not followed at the time by any ear trouble. About four months after her recovery from the fever she began to have occasional attacks of earache in the left ear, which continued without any treatment at the hands of a physician, for five months. At the end of this time she had a very violent attack, lasting several days. This was treated by instillations of warm oil and laudanum, and the external application of poultices. The pain was excruciating and seemed to be increased the first day by the use of the oil and laudanum, but on the second day it diminished. It was on this day that I saw the patient for the first time, but having no speculum sufficiently small with me, I was unable to do more than make an examination of the external portion of the meatus. Here there was no sign of inflammation, but the meatus seemed closed by swollen mucous membrane. During the whole of this day there was great itching, and toward evening the child called to her mother, saying that there was something crawling in her ear. Before her

mother came to her she put her hand under the poultice and pulled something from her ear, which broke in two while pulling it. She then pulled the other half out of her ear.

"The two pieces were preserved and shown to me about twenty-four hours afterward. They were parts of a lumbricoid, apparently about two and a half inches long.

"The child had no further trouble with her ear, and has not had since (nineteen months).

"The withdrawal of the worm was not accompanied by any blood. The ear was examined a few days afterward by Dr. A. G. Heyl, who found no evidence of perforation.

"Under the use of santonine, her child afterwards passed a single lumbricoid *per anum*."

CASE OF IMPERMEABLE STRICTURE OF THE URETHRA, WITH RETENTION.

BY LOUIS BRECHEMIN, M.D.,

Assistant Surgeon, U. S. Army.

John E. J., corporal in a U. S. cavalry regiment, age twenty-eight years, married, had gonorrhœa in 1868, which was not successfully cured, leaving him with a gleet which lasted two and a half years. His first attack of retention was in 1876, while serving with his company in the field, and was twenty hours in duration. The second attack lasted sixteen hours and occurred in the summer of 1878.

On the morning of February 12th, 1879, he was again attacked with retention. Acting Assistant Surgeon Ralph Ball, U. S. Army, failed to relieve him by instruments that night. The next morning, February 13th, I saw him at his quarters, and a recourse to catheterization having again failed, the usual treatment for retention, by opium, hot baths, etc., was adopted, and in the evening ether was administered and a third unsuccessful attempt made to pass the instruments. During this time the overflow of urine was passing away by drops. The opium was ordered to be continued through the night.

On the morning of February 14th a fourth attempt at catheterization failed, it being impossible to pass the finest filiform bougie. His urine was still dribbling, but as the bladder was getting larger and more tense, and now reached fully up to the umbilicus, it was determined to perform external perineal urethrotomy without a guide, in the hope that this operation would relieve the retention and make a radical cure of the obstruction.

Accordingly, at 2 P.M., assisted by Dr. Bell,

the patient was put under the influence of ether, placed in the lithotomy position, the staff introduced against the face of the stricture and held in position by Dr. Bell. The parts were then shaved and an incision made, in the median line, into the urethra, against the point of the staff. Threads were introduced as recommended by Gouley and Van Buren, but the oozing of blood was so great and so obscured everything, that it was found impossible to introduce a fine grooved director through the stricture. All attempts at so doing having proved failure, and the hemorrhage still continuing, rendered it necessary to use Monsell's solution. Supra-pubic puncture of the bladder was then performed with a trocar, and thirty-six ounces of urine drawn off. A soft catheter was inserted into this wound and allowed to remain, and the testicles were supported by a suspensory bandage.

The patient reacted nicely from the ether; temperature, eight hours after the operation, 100°.

February 15th. Patient doing well; wound in perineum ordered to be syringed out alternately with carbolized water and solution of potass. permanganate, and lint soaked in carbolized water placed over it. *Tr. ferri chlor.*, ter die; water passing freely from bladder by the catheter.

This treatment was continued up to February 22d, when the urine began passing by the natural channel.

February 26th. Catheterization attempted, but failed completely.

March 10th. Patient, being in all other respects in good condition, was allowed to go to his quarters.

March 13th. Complaints of pain and swelling of testicle; an attack of epididymitis beginning.

March 31st. Still under treatment; epididymitis nearly cured; passes his urine freely. Wound in the perineum has closed.

April 6th. The epididymitis having disappeared, an attempt was made to dilate the stricture. A filiform bougie was introduced after some trouble, and over this a No. 5 Gouley tunneled instrument. The dilator was next passed and the stricture gently stretched so as to admit a No. 8 olive-pointed elastic bougie; 10 grs. of quinine and $\frac{1}{4}$ gr. morphia given; no urethral fever resulted.

April 13th. Dilator introduced and stricture forcibly stretched so as to admit a No. 12 (Eng.) solid bougie. No bad result followed.

April 15th. Patient returned to duty.

April 20th. Patient personally passed a No.

12 elastic catheter without difficulty; general health excellent.

Fort Meade, D. T., April 9th, 1881.

COMPLETE OUTWARD DISLOCATION OF THE ELBOW.

BY WILLIAM EKWURZEL, M.D.,

Of Philadelphia.

On January 1st, 1881, Joseph Larer, carpenter, aged forty five years, was working with another man on a temporary staging, about five feet high, nailing up the inside planking on the wall of a carriage house. The scaffold consisted of a one inch board, sixteen feet long, resting at each end on a frail support. Each man kept well to his own end of the board, lest, under their combined weight, it should break in the middle. Notwithstanding this precaution the scaffold, all at once, began to fall in a line parallel with the wall, but so slowly that Larer felt no alarm, thinking he would stand upright, and go down with it safely. The other man, just at this time, jumped to the floor to save himself, and in doing so greatly hastened the fall of the scaffold, and doubtless threw the plank into such vibrations that Larer lost his balance, and fell, he does not know how, but those who were present assert that the plank on which he had been standing fell across the left arm above the elbow. On examination, three hours after the accident, I found the left arm deformed in a remarkable manner, the ulna and radius resting on the external surface of the humerus above the external condyle, and the olecranon process projecting prominently backward, while the internal condyle and the articular surface of the humerus formed a marked prominence below, over which the integument was tightly drawn. The forearm was flexed at a right angle, was quite immovable and forcibly pronated, the dorsum of the hand looking backward, as if the ulna, instead of sliding, had been rolled into its abnormal position.

Standing at the side of and somewhat behind the patient's left shoulder, I grasped the arm firmly with both hands, and with my thumbs forced the dislocated mass downward, and had the gratification of feeling the displaced bones ride over the external condyle, and slip into place (as I thought), under the end of the humerus. Instead of having effected complete reduction, however, my efforts had converted it into the ordinary backward dislocation of the elbow, which I reduced in the usual way, at once obliterating all deformity and restoring perfect motion to the joint.

The resulting inflammation was not severe, and in twenty-three days the patient returned to his work.

In looking over some back numbers of the REPORTER, in search of other matter, I stumbled over a report, in the number for March 22d, 1879, by Winfred Wylie, M.D., house surgeon in the Long Island College Hospital, of a similar case, with an illustration of the deformity, from which I copy the following quotation:—

"The large majority of outward dislocations of the forearm are incomplete; indeed, only nine examples of a complete dislocation have been collected by Denner, including two seen by himself. Maligne has since added two more, making in all eleven cases. All these examples have occurred in the practice of French surgeons. So far as I am able to discover, no American or English surgeon has ever reported a single example."—*Prof. Frank H. Hamilton.*

HOSPITAL REPORTS.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

CLINIC BY AUSTIN FLINT, M.D.

Professor of Principles and Practice of Medicine.

Hemorrhagic Diathesis.

GENTLEMEN—The case of anemia from hemorrhage, which I showed you at a former meeting, is not progressing as favorably as we would desire. He had a tooth extracted, and the bleeding from the socket continued for some time before it could be arrested. After that he had hemorrhage from the nose, and yesterday the anterior and posterior nares were plugged. The plugs were removed this morning, but the hemorrhage returned again, and the nose had to be replugged. It is a good case illustrative of the hemorrhagic diathesis, which we hoped in this instance was acquired. But the patient now informs us that his brothers also have the same tendency to bleeding, so that it appears to be hereditary. I will not stop now to discuss the causation of the hemorrhagic diathesis, or to speak of the hereditary, the congenital, or the acquired forms, but would recommend you to read up what has been written on the subject. I am sorry to say, however, that you will not be able to find an altogether satisfactory explanation of the pathological condition. It was supposed at one time to be dependent upon a deficiency of the fibrinous constituents of the blood, but that has been disproved, and it is the prevailing impression now that it is due to some state of the terminal branches of the arterial system, rather than to the condition of the blood itself.

Bright's Disease.

The patient before you, gentlemen, is a substitute for one whom I had intended to present to you, but cannot, for the best of all reasons,

viz., he is not in life to-day. It was a case of a complication of elements, one of which was an affection of the kidney. He had a thickened pleura, and some solidification of lung on one side. The object which I had in view in selecting that case was, to illustrate the way in which we are liable, without due care, to be deceived respecting the presence of liquid in the pleural cavity. That patient had marked flatness on percussion at the base of the chest, and there was also absence of the respiratory murmur, and from these two signs the natural inference at first would be, that there was liquid. There was none, however, as was shown by the introduction of the hypodermic syringe. I meant to have shown the case as illustrative of the importance of vocal resonance in preventing error of diagnosis; vocal resonance continued down to the very base of the chest, which was conclusive evidence that there was lung there, irrespective of the demonstration by the hypodermic syringe. In the absence of that patient the doctor has brought up this patient, whom I have not seen before, and to whose case we will devote only a short time. I will read from the recorded history:—

Samuel —, sixty years of age, a native of Ireland, a tailor, admitted on the tenth of this month; nothing important pertaining to his family history. His personal history is as follows: He has always been accustomed to the use of alcoholic beverages, sometimes taking them in considerable quantities. He had been drinking a large amount of beer for two or three days before his present illness, which commenced three weeks ago. The first thing he noticed was oedema of the scrotum and of the penis; then the legs and feet began to swell, and he became puffy about the eyes; he had considerable pain in the head, misty vision, spots before the eyes, and vertigo, also a feeling of great oppression at the stomach, with nausea, pain in the loins. He noticed that he passed less water than usual, that it was very dark, and had pain in the end of the penis during its passage. On admission, the lower extremities were oedematous, likewise, the scrotum and the eyelids. He complained of pain in the back, of loss of appetite, and a general feeling of malaise. Physical examination of the chest showed the lungs to be normal, the urine was amber colored, cloudy, of a specific gravity of 1.010, acid, and contained about ten per cent. of albumen, the whole quantity being twenty-one ounces. He was put upon the bitartrate of potash, and upon the infusion of dog-grass, or *triticum repens*, as a diuretic. On the 11th he passed twenty-four ounces of urine, and on the 12th, forty-eight ounces, so that the dog-grass seemed to have had some diuretic effect.

Such, gentlemen, is the history, and the first question which arises is: Is this an acute diffuse nephritis, or is it some one of the several chronic forms of renal disease? That is a question which often presents itself to us, both in private and hospital practice. The patient, as in this case, notices first oedema of the limbs, then oedema of the face, increasing more or less, and with that, loss of appetite, impairment of strength, some pain in the back, general de-

bility, the urine scanty, dark colored, smoky, and even black in some instances, the specific gravity usually high. Now, with the exception of the last fact, what I have just stated is a synopsis of the history of this case, and that group of symptoms points to acute diffuse nephritis; and if we are quite sure of that, and that there was no anterior affection of the kidney, we may always entertain a favorable prognosis, we may expect the patient to recover. There are some exceptions to that rule, but we have a right to expect recovery. We have also a right to expect that the acute will not be followed by a chronic form of the disease; but there are exceptions to this rule also. We did not see the urine when it was dark, as this patient describes it, for it loses this dark color after a while, and this patient had been sick three weeks before he entered the hospital. This dark color, by the way, is due to the presence of hæmatine, and sometimes the urine presents very distinctly a bloody appearance.

In concluding that we have a right to infer that this patient has had an attack of diffuse nephritis, an important question beyond that is, did this attack of acute nephritis occur when the kidneys were healthy, or was it superadded to a chronic affection? This latter fact obtains not infrequently. There are two points in this case which have a bearing on that, and these two facts are opposed to each other. The low specific gravity, with the small quantity of urine which the patient made when he entered the hospital, are not very consistent with simple acute nephritic disease, and yet it would be wrong to base a positive judgment upon an isolated fact like that. So far as that goes it would rather tend to show that there was an old affection prior to the development of this acute affection. The other point is this, that the lungs are normal. If this patient had a chronic form prior to this acute affection, it probably was a fibroid or contracted kidney, which leads after a time to enlargement of the heart, without, of course, valvular lesion. If, then, we were to find in this case hypertrophy of the left ventricle it would be a very strong point as regards the prior existence of a chronic renal disease; and the fact that the left ventricle is not enlarged does not bear as strongly against chronic renal disease, although it has a certain amount of weight on that side. On examining his heart I cannot detect anything abnormal, so that we are justified in considering it probable that this is an instance of acute diffuse nephritis, which is progressing favorably under the use of simple diuretics, and if this view be correct we may look forward in a week to much more improvement in the patient's condition, expecting that the urine will increase in quantity up to the normal, be increased in specific gravity, that the albumen will be diminished, that the little dropsy which he now has will have disappeared, and that he will be improved in all respects.

Heart Disease.

It occurs to me, gentlemen, to mention some circumstances which relate to the diagnosis of functional disorder of the heart. I received a letter yesterday from a medical man who lives at a considerable distance, who is very anxious on

the subject of disease of the heart; he said in his letter that he was about fifty years of age, and he had during nearly half that period been actively engaged in the practice of medicine; for ten years or longer he had suffered at times from an affection of the heart which rendered him very anxious; and for a long time he had been intending to come and have me examine his heart, but something prevented. Within the past few weeks the disturbance of the heart was very great. He wanted to know if it was possible for me to come and see him. I relate this circumstance with a view of impressing upon you two or three points. I have scarcely any doubt that that man is suffering from a purely functional affection of the heart. Why? Because he has had a disturbed action of heart, off and on, for a long time, and if that disturbed action were due to an organic lesion matters would have developed in a very decided way before this. Then he does not mention that he has any dropsy; he only mentions disturbed action of the heart, and some disturbance of the respiration. He also mentions that he has been a sufferer from dyspeptic ailments during pretty much all his professional life. In my answer to day, I told him he could settle the matter almost certainly himself, and in a very simple manner. If he found the apex beat in the fifth intercostal space, near the vertical nipple line, and the resonance on percussion equal, just without the nipple on the two sides of the chest, he might feel sure that his trouble was purely functional. Now, those are very simple points to ascertain. Anybody can ascertain where the apex beat of the heart is, and it is very easy to determine whether the resonance at the points indicated be equal. Now, why was I warranted in saying that? Because, if the resonance and the apex beat of the heart be found as stated, enlargement of the heart may at once be excluded; and if there be no enlargement of his heart, his trouble must be functional, even if we assume that there be valvular lesions, for valvular lesions do not lead to disturbance of any great amount until they have led to enlargement of the heart; and if, then, there were no enlargement of the heart, which would exclude any organic trouble, he would know that it was a functional disturbance, and need not worry. Thus I wrote him, and told him to try to relieve his dyspeptic ailments by tonic remedies, by taking good substantial diet, which is the proper treatment of dyspeptic ailments in general; to take a little wine, under scriptural injunctions, and for the reason given in scripture, and to get a little change of scene, without the annoyance incident to medical practice; and another very important thing, to put the heart as far as practicable out of his own mind, and never to feel of his pulse, or try to listen to his heart sound. I venture to say, that I shall get a reply by and by, saying that he is comfortable, easy.

Dysentery.

I shall detain you but a few minutes with our next patient, I am told that it is a case of dysentery, which is an important subject, being a common disease, and a good deal might be said about it, but we have other cases which we want to present, and our time is limited.

Her name is Sarah —, thirty-two years of age, a native of Ireland, a domestic. Admitted on the 11th of this month, day before yesterday. She is a hard working woman, employed in a laundry, exposed to variations of heat and cold, and on the sixth of this month was taken with a severe pain in the stomach, followed by vomiting and passages of a diarrhoeal character. The diet had been simple, containing nothing to which the symptoms could be attributed. The colicky pains soon became more severe; she lost her appetite, and suffered from a general feeling of malaise. The next day the dejections were more numerous and mucous in character, and accompanied by tormina and tenesmus, those two classical symptoms which are diagnostic of dysentery. Then the dejections became muco sanguineous, with almost constant desire to go to stool, although but a small amount was evacuated. You see the dysentery was preceded a day or so by diarrhoea, which is always the case, the diarrhoea lasting a variable length of time; then she had the characteristic stools, mucus and blood, or bloody mucus, accompanied by tormina, griping pains, and tenesmus, a sensation as if the rectum was full, giving rise to a strong desire to make effort at defecation—a sensation due, not necessarily to the presence of anything in the rectum, but to an inflamed condition of the mucous membrane.

She complained, on admission, of great prostration, of anorexia, of soreness and pain in the abdomen, together with the symptoms above described. The stools muco-sanguineous, sometimes almost pure blood. The temperature was 101°, the pulse 110.

This patient got half an ounce of whisky every two hours, and ten grains of the subnitrate of bismuth every three hours, and also tincture of opium, tincture of aconite, and the chalk mixture. During the night of the 12th she had five muco-sanguineous passages. She says she feels weak this morning. The above prescription was changed by increasing the opium at each dose, regulating the quantity by the effects upon the respiration. The respirations went down to seven a minute, when the medicine was stopped, and one ninety-sixth of a grain of atropia was given hypodermically, and gallic acid was given during the day. The next night the passages were diminished in number, being only three. The patient's appearance is better to day.

I would simply direct your attention to the treatment in this case, saying that I believe it is the correct one; and would add that if, by manipulation of the abdomen and by the character of the stools, you can satisfy yourself that there is fecal matter in the intestines, they had better first be evacuated, after which, as I am well convinced, the proper treatment for dysentery is the employment of opium in some form, carried up to a point of comfortable tolerance; and I introduce this case as illustrative of that method of treatment, and of its probable success. In a disease of this form, which involves no danger to life, the treatment is a mere question of relief and shortening the duration of the disease. I believe that by this method of treatment we can accomplish these ends; at the same time we are to bear in mind the fact, which was established in

this hospital some years ago, that dysentery is a self-limited disease, running its own course, and ending in recovery, with some rare exceptions, its average duration being about eight or ten days; still, I believe that we not only mitigate, lessen the extent of the disease, but shorten its duration, by resorting to the use of opium.

Cirrhotic Liver.

This specimen was taken from the woman who was shown you at a former clinic, and represents the gross appearance of a cirrhotic liver. It is very much contracted, and presents the hob-nailed appearance in a very marked degree. I will only say, regarding the case, that the patient was tapped several times for abdominal fluid distention, which gave marked relief, and probably prolonged life. She gradually failed, however, lost her appetite, and died of exhaustion. When the autopsy was made, the liver weighed thirty ounces, the normal weight of the liver being about four and a half pounds.

The next cases that I shall present to you, gentlemen, are examples of a disease which I leave for my colleague, Dr. Janeway, to lecture upon. But as there is no didactic course at present, I will make some remarks upon these cases. The history of the first patient reads as follows:—

Aphasia.

David —, fifty-five years of age, a laborer, a native of Ireland, admitted on the eighth of this month. He has been for years a hard drinker, frequently going off on a prolonged debauch, and being drunk most of the time for a month or two. About six weeks ago he was suddenly taken with convulsions, grew black in the face, foamed at the mouth, worked the legs and arms, and then lay in an unconscious state for several hours. His condition gradually improved, and after four or five days he went to work again. Two weeks ago he was attacked in a similar manner, and when consciousness returned it was found that he could not speak, and that his right side was paralyzed. Since then he has been lying in a stupid condition, unable to speak, with but slight power of motion, and rejecting all food. That was the history obtained when he entered, on the eighth instant. On his admission no history could be obtained from him. He had aphasia; was stupid; the pupils were normal; there was no paralysis, no cardiac affection; the arteries were atheromatous. The arteries now feel like a tube composed of hard rings. On the 10th he was a little less stupid, and, although articulation is difficult, he can speak a few words. He takes food much better. The urine is albuminous, but no casts have yet been found, of normal specific gravity.

This, then, is a case of aphasia, connected with paralysis of the right side. These attacks of epileptoid convulsions were very probably due to the excessive use of alcohol, although there is ground for strong suspicion that there exists renal disease. I do not think it is possible, from what data we have, to decide whether the coma and convulsions were alcoholic or uræmic; there may have been a mixture of both. He has recovered from the paralysis, so that we may conclude that there was no extravasation of blood;

there was either thrombosis or embolism, not sufficient to produce any persistent obstruction.

Now, in regard to the aphasia, of which I wish to speak in connection with this and another case; the patient is now able to speak, but how much it is difficult to tell, for he was and is stupid, his general mental faculties being oppressed. Before making further remarks I will bring in the next patient.

No previous history was obtained of this patient, but he has a pulmonary affection, and when he entered the hospital, about three months ago, he had complete aphasia, and paralysis of the right side of the face. You notice that today there is scarcely any paralysis of the face, and that he can speak, although he uses words with difficulty, and sometimes uses wrong ones. He has, then, paraphasia.

I will present some general remarks in connection with these two cases, but have not time to go fully into the subject of aphasia. We mean by aphasia the loss of speech, in contradistinction to the loss of voice, which is aphonia. As a rule, aphasia occurs in connection with right-sided paralysis or hemiplegia. With few exceptions the paralysis is on the right side. The cerebral lesion, of course, being on the left side. But we sometimes meet with aphasia, as in this case, without any paralysis of the extremities; there is no evidence that this patient had any paralysis of the upper or lower limbs, but, as you see, he has some paralysis of the facial muscles. We may have aphasia, however, without any motor paralysis. We occasionally meet with cases of that kind. Aphasia has given rise to a good deal of observation and discussion within the past few years, and it still opens a field for discussion, and further investigations are very much to be desired. We have come to know that in a large proportion of cases of aphasia a lesion of some kind exists in the left anterior portion of the cerebrum, in the neighborhood of the island of Reil, and more especially in the posterior part of the third frontal convolution. Now, we may assume that this localization is the rule, but with some exceptions. In some exceptional instances the lesion is similarly located on the right side, giving rise to left hemiplegia; and in some instances, as stated, the lesions are found elsewhere, while the situation in which lesions are usually found is free from lesions. There is always some room for doubt in regard to the latter part of the statement, because there may be lesions which may escape attention unless very close examination be made, and perhaps the closest examination may fail to discover a lesion which does exist.

Now, when we come to the symptom, we find that it differs in different cases, and there are different varieties of aphasia, and some writers, especially the author on that subject in Ziemssens' *Cyclopaedia*, go very much into refinements, in some of which I do not see any practical advantage. But some distinctions are obvious and important. There is one variety of aphasia in which the patient has evidently in mind the appropriate words for expressing the idea; that is, there is no lack of the symbols of ideas which language furnishes in the mind of the patient,

but the patient cannot give utterance to those words. The words are in the mind, but they cannot be conveyed by speech. And when this kind of aphasia is complete the patient is perfectly mute, and says nothing, and makes no effort to say anything. That is known as ataxic aphasia, but it is not a proper term, for ataxic means a lack of coördinating power in the muscles, but the patient does not move the muscles at all. You cannot compare it with a case of locomotor-ataxia, in which the patient uses the muscles, but does not use them right. As just said, in this so-called ataxic aphasia there is no effort to use the muscles. Exactly what the nature of the difficulty is, it is difficult to say. But we see the character of the difficulty; the patient cannot give utterance to the words which are in his mind, to express his ideas. That the words are in his mind is evidenced by the fact that he can write them. He knows and understands the words, but cannot give utterance to them.

Then, there is another variety of aphasia known as amnesic aphasia, in which the patient cannot communicate the words expressing ideas, either orally or by writing. This implies a greater aphasic effect than the other. There is still another, in which the patient cannot communicate his ideas by signs, and he does not understand words when spoken to him. Here we have a combination of the different varieties. But in this latter case it seems to me clear enough that there is a condition of mental imbecility. A pretty important conclusion, if true; although I would not say that the patient must necessarily be altogether without intelligence, like an idiot. The difficulty involved carries with it a certain grade of insanity, so that the patient is not accountable for acts. But in ataxic aphasia there is every reason to believe that the patient may preserve the intellectual faculties intact, being capable of performing important acts which shall stand in law, such as the making of a sale, transferring property, and so on. That is a question of much interest and importance when made the occasion of very important medico-legal investigation.

Then, there is another form still, in which the patient has not lost the power of endeavoring to express words by speech, but there is not the command of words which the patient wishes to use to express ideas. He uses wrong words, as this second patient does; although he has improved to a certain extent, he uses wrong words, paraphasia, as it is called. Such a patient seems, sometimes, to have clear enough ideas in the mind, but when he attempts to convey them he uses language which conveys to the listener no apprehension of the ideas which he wishes to express. I have been for several days seeing a patient who has this form of aphasia. There was a little paralysis of the right side, perhaps a little now, but it is very slight. That patient, whenever I see him, endeavors with the greatest possible earnestness to try to express something to me, but he uses incoherent words; his speech is a jumble of words, so that one cannot form the least idea, from the words he uses, of the ideas which he wishes to convey, and that fact gives him, as it is apt to do patients who retain their

intellectual faculties more or less complete, an intense feeling of chagrin, so that after talking that way for a while he becomes almost wild with a feeling of irritation. Paraphasia is the proper name for it. In a practical view this is probably a sufficiently comprehensive representation of this symptom.

Now, these forms of aphasia depend upon the different causes which may give rise to paralysis; and aphasia usually, but as I have stated, not invariably, is associated with paralysis. These different conditions are: Extravasation of blood, and the formation of a coagulum within the brain, thrombosis, the obstruction of an artery

by the conveyance to it and judgment in it of a clot from the heart, an embolus. These are the three causes which stand in relation to the aphasia and the paralysis in the great majority of cases; but other lesions of the brain may be the cause, such as a syphilitic growth, and tumors of different kinds, etc.; but I repeat that, in the great majority of cases, when we come to the question of the pathological condition, we have to decide between extravasation of blood, thrombosis and embolism. I would take up some differential points, etc., but we have not time to-day.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Revival of Static Electricity.

There is an evident revival of static electricity among electro-therapeutists; several articles have already appeared in the *REPORTER* on the subject, and we note one in a recent number of the *Revue Mensuelle*. The *Lancet* observes that the principal advantages of this mode of treatment may be rapidly summed up under a few headings.

1. Anæsthesia: The electric bath, methodically applied with a sufficiently powerful machine during a period of twenty to thirty minutes, and repeated about three or four times a week, has a most remarkable influence upon the cure of anæsthesia. It is, of course, in hysteria that the most rapid, and, it might almost be said, miraculous cures have been effected. No wonder, since even the application of a piece of wood, or a layer of collodion, has sufficed in certain cases to give a good result. But loss of sensibility has been repaired in far more unpromising cases, where organic injury to the nervous centres had been distinctly ascertained; and where the normal condition has not been restored in other ways a great improvement has been achieved in this respect. 2. Contracture, whether hysterical or of a less immaterial nature, has also been successfully treated by Franklinism in our own time, as, in days gone by, the Reverend John Wesley, as we have seen, testified to the marvelous results produced by its use. 3. Chorea and nervous trembling have in various cases been radically cured by the same means. 4. Suppressed menstruation has been restored after a few sittings. 5. Hyperæsthesia and neuralgia have in some instances been relieved, in others radically cured. Our forefathers stated that hypochondria was among the diseases which might be checked by Franklinism. We need not, therefore, be surprised to find that neurasthenia, an ailment closely allied to hypochondria, if it is not the same malady under a more recent and dignified name, has often been considerably ameliorated by the electric bath. That reverses will occur in the practice of every one who adopts static electricity as a mode of treatment, is a fact which can easily be foreseen. All that can be claimed

from a positive knowledge of authentic cases is that relief will sometimes be obtained where pharmaceutical treatment had failed as completely as galvanism or faradism in restoring health. The subject is one which deserves the attention of medical men, and which will, undoubtedly, reward the labors of all scientific observers who may choose to investigate it. Possessing, as we do, generators of a power unknown to our predecessors, better acquainted than they possibly could be with the physiological action of the electric fluid under its various forms, and rich in the accumulation of an immense store of clinical knowledge, we can easily avoid the errors formerly committed in theory, and obtain more satisfactory results in practice. At all events one thing is clear. Electricity may be applied to the treatment of disease in all its varied forms, and we should avoid an exclusive and egotistical attachment to any one method recommended by a particular authority.

The Diagnostic Importance of Odors.

In a recent lecture Dr. Julius Althaus, of London, says:—

I must say a few words on the *diagnostic importance* of certain smells in the sick-room, which was formerly much insisted upon; indeed, whole treatises have been written on the recognition of disease by sniffing. Dr. Heim, who was the popular physician of the day at Berlin some fifty years ago, recognized measles, scarlet fever and smallpox by their peculiar smell on first entering a house, and before having seen the patient. Mr. Bernard, of Upton Park, has recently recorded in the *Lancet* two cases of smallpox in which the patients themselves perceived a dreadful smell, apparently just at the moment of being exposed to contagion; and one of them when suffering from the eruption said that his perspiration had the same smell as that which made him sick before. When attending Skoda's clinique in Vienna, twenty-five years ago, I noticed that this celebrated teacher was in the habit of sniffing when approaching the bedside of patients suffering from the last stages of pneumonia, phthisis, typhoid fever, etc., and he would give a bad

prognosis when he perceived what he called the "cadaverous smell." Mr. Crompton, of Birmingham, has noticed a peculiar earthy smell from the body a week or a fortnight before death, which, he says, has never deceived him—an appropriate illustration of the saying, "Earth to earth." Dr. Begbie distinguished typhus and typhoid fevers by the sanguineous (others call it "mousey") smell of the former. Prof. Parkes has noticed a peculiar odor in the skin of cholera patients. A pungent smell in the chamber of a lying in woman shows that lacteal secretion is well established, while an ammoniacal smell has been said to indicate the approach of puerperal fever. Many women emit a peculiar odor while menstruating, which resembles a mixture of blood and chloroform, and this is believed to arise not so much from the discharge as from the more pungent character of the sweat secreted in the axilla. Persons of costive habit have a fecal smell; and this is also often noticed in hypochondriacs and lunatics. In uræmia, whether owing to kidney disease or to severe retention of the urine, a urinous odor is emitted by the body, and the presence of pus in some part of the body has been recognized by a peculiar warm, milky smell of the patient.

Apart from the odor of the sick-room and the body generally, the smell of the sputa, urine, feces, sweat, ulcers, etc., was carefully noted by the older practitioners, and utilized for prognosis and treatment. Unquestionably there was much that was fanciful in such ideas; but occupied as we are at present with the study of more precise and definite symptoms, we have, perhaps, gone to the other extreme in neglecting such signs altogether. Everybody has his own special odor, and this varies according to the circumstances of life, the food taken, and the state of health in which he happens to be. That it should be altered in disease, and that special diseases should have special odors, is only what one would expect; yet the increase of cleanliness and ventilation has no doubt done away with a large variety of smells which formerly used to assail the nostrils of the physician.

Perchloride of Iron in Epithelioma.

Several cases of uterine epithelioma at the London Cancer Hospital, treated by perchloride of iron, are given in the *British Medical Journal*, May 21. We quote one, with the remarks of the physician, Dr. H. L. Snaw:—

Epithelioma of Cervix Uteri.—M. W., a married woman, aged 40, was first seen on July 11th, 1880. She had one child, aged 10. Four months previously severe flooding came on; and a hemorrhagic discharge had, with short intervals, during which it was watery, persisted from that date. For two or three months she had suffered from severe pain down the right hip, and from backache. On July 11th she was very anæmic. The whole of the margin of the os was soft and spongy, and bled profusely when touched. Tissue of this character could be felt for about one-third of an inch all around the outside, and as far as the finger could reach within the uterus. Solid perchloride of iron was placed as nearly as possible in contact with the diseased structure,

and retained in position by oiled cotton-wool. Hemorrhage ceased, and pain diminished after the first application. The medication was repeated at weekly intervals for five weeks. She continued in fair health after this, suffering occasionally a little pain (relieved by morphia and belladonna at once) until October, when the hemorrhage recurred. It ceased after another application of the perchloride, repeated again a week later. On November 5th she was in every way better. When next seen, in January, 1881, pain had returned, and there was a profuse watery discharge; there was irregular ulceration around the os, but no papillomatous growth, so the perchloride was not again applied. In March, 1881, the patient was gradually growing weaker.

Remarks.—This treatment is adapted only to papillomatous growths, for masses of soft spongy tissue; in the later stages of epithelioma, where ulceration has removed all the papillomatous tissue, it is of little use. The iron salt appears to "tan" the soft vascular fringes; its use is attended by little or no pain, and appears to be free from danger. In the first and third of these cases it was of unquestionable use; in the second case induration had advanced too far to allow much improvement. This treatment is especially adapted to cases in which the uterine cavity is filled by a villous growth, and obviates all danger from the use of tents, as the os is usually sufficiently patulous to allow the pieces of perchloride to be placed in contact with the growth; a pledget of oiled cotton-wool will then keep them in place. Staining of the fingers may be avoided by previously thoroughly oiling them.

Inhalations of Sanguis Bovinus Exsiccatus.

Dr. C. Seiler, of this city, writes to the *Therapeutic Gazette* for May, 1881:—

Some time ago my attention was drawn to sanguis bovinus exsiccatus and I have used it since in several cases of tubercular and syphilitic laryngitis, in which the act of deglutition was extremely painful and almost impossible, in a novel and very satisfactory manner. Instead of giving it by the mouth or rectum I directed my patients to inhale a solution of the blood, to which a little morphia had been added from an atomizer, and found that in this way they obtained a considerable amount of nourishment from the absorption of the solution by the mucous membrane of the air tubes, and probably also of the lungs.

Having heard from Dr. Stewart that on microscopical examination of the dried blood no blood corpuscles had been found, which seemed to me strange, I first examined a watery solution of the preparation under the microscope, but was unable to detect any blood corpuscles. I then dissolved the dried blood in neutral salt solution, when there was no difficulty in observing numerous restored blood corpuscles; fresh serum I found to have the same effect as the salt solution.

It would seem, therefore, that if the desiccated blood were dissolved in normal salt solution, and that if it were absorbed into the system without having first been digested by the gastric juice, we would have a species of transfusion on a small scale. The results obtained from the adminis-

tration of the blood per rectum, as well as in the manner above alluded to, would warrant such an assumption, which for its verification, however, needs careful observation and experimentation.

I communicate these facts, as they may possibly be of value, and would state that should the matter be considered of sufficient interest I would be willing to furnish a detailed report of the microscopical examination, as well as a photomicrograph of the blood corpuscles, so that there can be no doubt as to their presence in this preparation.

A Case of Blue Chromidrosis.

Some curious cases of chromidrosis were recently presented to the Clinical Society of London by Dr. T. C. Fox.

One case occurred in a girl aged eighteen years, a partial deaf-mute, but otherwise intelligent and of good physique, who presented herself among Dr. Donkin's out-patients at the Westminster Hospital, for the relief of a conspicuous and symmetrical black pigmentation of the eyelids and considerable portion of the adjoining cheeks, which caused great concern to the girl and her friends. The catamenia appeared first at the age of fifteen, and had never since been regular in time or quantity, and since that age the girl had suffered from general malaise, severe headache, and very marked habitual constipation. She was not a hysterical subject. The pigmentation was first noticed in September, 1880, on the lower lids, whence it gradually spread over the adjoining portions of the cheeks. Through the kindness of Drs. Sturges and Donkin she was placed under observation in the Westminster Hospital on three occasions, and it was found that the pigmentation varied considerably in amount and intensity, though present in some degree almost continuously. It was always less at the catamenial periods, but seemed to bear a direct relation to the very obstinate constipation, and was more intense and extended the longer the interval between the relief of the bowels. It was found, on many occasions, that whenever the latter became regular the pigmentation disappeared. As a proof of its genuine character, Dr. Fox described the precautions taken to watch the case, on one occasion, for thirty-six hours, after the face had been thoroughly cleansed, but the pigmentation steadily returned. The urine was examined on several occasions, for indican, which was found always to increase markedly in amount *pari passu* with the constipation and the exudation of pigment on the face. This fact, and the relation of the exudation to habitual constipation, are new points in connection with the affection. Examination of the pigment showed it to present characters in all respects similar to those hitherto recorded in other cases by Charles Robin and others. The india-ink-looking amorphous granules were found insoluble in almost all reagents, hot or cold, but displayed a deep blue color when moistened with glycerine, and when dissolved in hot sulphuric acid first gave a beautiful purple hue, and finally, a bistre tint. The pigment was evidently indigogenous.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Dr. Lewis D. Mason, Surgeon to the Long Island College Hospital, sends us a report of several additional cases of fracture of the nasal bones treated by his new method.

—We have received a reprint from the *Medical Record*, April 30th, 1881, of a paper on "Nasal Stenosis, Its Influence on Olfaction, Audition, Vocalization and Respiration, and its Treatment," which was read before the New York State Medical Society, February 1st, 1881, by J. O. Roe, M.D., of Rochester, N. Y.

—"The Quality of Mental Operations Debased by the Use of Alcohol—Certain Depraved Mental States Analyzed," is the subject of a paper by Dr. T. L. Wright, of Bellefontaine, O., published in the *Alienist and Neurologist* for July, 1881, a reprint of which has been sent us. The paper is valuable in a medico-legal point of view.

—In the address of the president, Dr. Louis A. Duhring, delivered at the fourth annual meeting of the American Dermatological Association, held at Newport, R. I., August 31st, 1880, on the "Foundation of American Dermatology," a copy of which we have just received in pamphlet form, a critical review of the progress in this department of medicine during the past decade, is presented. The address is closed with a few appropriate remarks on the late Prof. Hebra, the father of dermatology, and the loss which science has sustained by his death.

BOOK NOTICES.

The Principles of Myodynamics. By J. F. Wight, M.D., Professor of Surgery and Lecturer on Physical Science at the Long Island College Hospital. New York: Bermingham & Co., 1881. Cloth, 12mo, pp. 162. Price \$1.50.

The intelligent student will find in this little book a philosophical analysis of this subject, a thorough familiarity with which is indispensable to the rational treatment of fractures, dislocations and deformities, and which will thus prove of inestimable value to the surgeon. After a classification of the various forces produced by muscular contraction, and a brief explanation of the same, each group of muscles and their actions are examined separately, after which a description is given of the myometer, and its use explained. The principles set forth are illustrated by numerous diagrams, and everything is done to render the subject both attractive and interesting.

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TWO NEGLECTED CLASSES.

There are two charities which are particularly needed in the large cities of the United States, as in not one of them, so far as we know, is there proper provision for the cases to which they apply.

The one is Lying-in Hospitals for Unmarried Women; the other is Hospitals or Asylums for Foundlings.

The reason of their scarcity is, apparently, that the prejudice is extant that they aid in the dissemination of vice, or that they facilitate it, by presenting a refuge for its results. Such a doctrine, if logically carried out, would pretty much do away with all hospitals and all charities, for it is far more frequently vice than misfortune which ultimately drives a human being, in our country, to public charity of any kind. At best, it is improvidence, negligence, or idleness, which, according to Solon, are as bad as actual viciousness.

Sexual vice, has, however, for the prudish

charity of our land, some specially abhorrent features, which it is the fashion to shun with the utmost pointedness. Many social philosophers have expressed the opinion that, except crimes of violence, there can be no intrinsic criminality in sexual relations, and that their position before the law is purely one of custom and statute. Without entering at all into this question, which would lead us far afield, the fact that an exaggerated sentiment on the subject prevails in this country is sufficiently obvious from the absence of any but the worst provision for these needy classes in our great cities.

This is frightfully obvious in Philadelphia, as respects foundlings. We recently mentioned that they are usually sent to the Almshouse, where they all die. The public attention has been called to this fact by the Grand Jury, and the Society for the Protection of Children from Cruelty has announced itself ready to care for a limited number. But the fact that amid all our charitable institutions we have no foundling hospital is a disgrace and a discredit to our civilization and our boasted religion.

We are somewhat better off in reference to the other class mentioned. There is in this city a most worthy and well conducted charity, unfortunately far too small and too much cramped for means to meet all the demands upon it. It is the State Hospital for Women and Infants, the Seventh Annual Report of which now lies before us. We cannot do better than make a long extract from this report, which ably sets forth the aim and sphere of labor of such an institution, and the need of exertions in its aid:—

The necessity for such an asylum in this community is evident when it is considered that less than one-third of the applicants can be received in our institution, and that, notwithstanding the number and variety of hospitals, homes, and asylums offering generous provision to the poor and unfortunate, including all ages, both sexes, without distinction of nationality, creed, or moral character, every other door but that of the Almshouse is closed to her who, unmarried, is about to become a mother. Deliberate, calculating villainy, fraud, outrage, burglary, or even murder with malice aforethought, seems to excite more sympathy, more helpful pity, more efforts for the reclamation of the transgressors, than are shown toward those who, if not the victims of others, are, at the worst, but illustrations of

human infirmity. It is a question worthy of serious consideration, whether this denial of charity is not a sin against humanity as great as that thus denounced is against society.

But it is not alone for their sakes, whose sin even, as well as their wretchedness and helplessness, pleads for them; not alone for the sake of their innocent offspring, who might at least be saved from the life-long disgrace of birth in the poor-house; but for the sake of society itself, that a refuge should be provided. It is a sad commentary on the boasted benevolence and Christianity of the community, that a girl—perhaps a mere child—who has made the one terrible mistake, is thenceforth cut off from help and hope, and finds every door fast shut through which she would return to an honest life. Is it to be wondered at that she grows desperate under a sense of wrong and of subsequent uncharity and injustice, until, losing all faith and all shame, she herds with the vilest and most degraded of her sex, and sinks into depths of depravity known only to those whom society has cast off? Do not society and the church have their share of responsibility for every such life? It is not necessary to acquit the erring ones of guilt, or to make their misdeed a light matter, though but few of them fall from vicious inclination—most of them through their affections; and it is simply inhuman to make their recovery hopeless, to force upon them the conviction that there is no chance for them, that, try as they may, do what they may, there is nothing for them but to go to the grave with their reproach cleaving to them, while the sharers, and probably the authors, of their sin bear no part of the punishment or the shame.

We need, to prevent misapprehension, to constantly repeat that the chosen work of this institution is not to reclaim women far gone in the paths of degradation, but to save frailty from degenerating into depravity. If it is better to prevent an evil than to cure it, the State Hospital commends itself, by this standard, to the confidence and support of humanitarians.

These are stirring words, and they apply to every large city in our land. They should be responded to by those who with ample wealth are looking where they can spend a portion of it with the most benefit to their fellow creatures. We make the appeal for the two classes who are most friendless and helpless, who are most debarred from the sympathy of their kind and least able to protect and help themselves.

There are other nations in which they are better looked after than with us, where helping hands are extended to their aid, and kindly hearts are willing to lift them from their deep misfortune, confident that no sad association, no bitter prejudice, no wrong doing should check the workers of mercy and hinder the love due our neighbor.

SEASHORE HEALTH RESORTS.

All along the North Atlantic shore, from the mouth of the Delaware to Eastport, in Maine, there is almost a continuous row of summer hotels and boarding houses. The migration of the inlanders to the coast is something enormous, and is yearly on the increase. It is said that as many as one hundred and fifty thousand visitors have arrived in Atlantic City, New Jersey, alone, in the course of one year; and this is but one of many popular watering places.

Pleasure and fashion attract most of this multitude, but a goodly share go for their health; and if the time is properly spent, and the laws of hygiene observed, nearly all will gain in vigor and return braced up for work and renewed energy for the daily conflict.

There are a few with whom the air of the sea coast does not seem to agree. Most physicians who have studied the matter incline to the opinion that consumptives had better keep away from the coast. The mixture of land and sea air, says one of these writers, is unfavorable to delicate lungs. The mortality from phthisis, says another, is, as a rule, greater on the sea coast than on the same parallel inland. The air of the open sea is held to be better for such cases than that of the coast. We can ourselves recall several cases of phthisis which grew worse after a brief sojourn by the sea.

We opine, however, that a distinction may here be drawn, and one of importance. The inflammatory and catarrhal forms of phthisis—to make use of a, perhaps, antiquated but yet convenient classification—are probably generally injured by the alternating land and sea breezes, and the moisture of the coasts; but the serofulous forms are unquestionably benefited. In fact, it has long been known that many forms of strumous disease quite intractable in hospitals recover spontaneously and promptly, when brought to the sea coast.

Establishments for children have long been successfully conducted on the Northern and Western coasts of France; there is a "Children's Hospital" at Atlantic City, which shows admirable results; and quite lately Dr. F. W.

BENCKE, Professor of Pathological Anatomy in Marburg, has published an instructive little book on the advantages of the islands of the German Ocean for similar cases. This learned author states that many years' observation convinces him that the most rational treatment of phthisis which rests on a scrofulous basis is a prolonged residence on the coast islands of the German Ocean. As a health resort for this class of cases he places these islands ahead of the famous Alpine Station Davos, or the celebrated villages of the Riviera and Italy. Partly owing to his strong representations, one or more establishments especially intended for scrofulous and phthisical children are to be erected on these islands.

Probably in no deterioration of health are the beneficent effects of the sea coast life more promptly marked than in the mental and nervous exhaustion which follows excessive intellectual effort, mental overwork and strain; that which is consequent on

"The heavy sorrow, the bewildering pain,
That weighs us down who toil and earn our bread."

It is marvelous to note how soon the fagged-out, jaded man of business recuperates in an atmosphere seasoned with ocean's healing odors. For a day or two he is overcome with drowsiness, the long strain relaxes, and the much-needed rest is taken in deep slumbers. Then follow the restoration of energy, the keenness of appetite, the ready digestion, which pave the way for a renewal of the system.

Few indeed will find a fortnight lost who pass it sensibly at the seashore. Its effects will remain with them for months, and perhaps will save them the trial of a long and painful malady.

NOTES AND COMMENTS.

Therapeutic Notes.

FUMIGATION IN ASTHMA.

R. Potassii nitratis,
Pulv. anisi, ʒi
Pulv. stramon. fol., ʒj. M.

A thimbleful of the powder, placed on a plate, is pinched into a conical shape and lighted at the top. It is then held near the patient, who inhales the fumes. This is a celebrated London "anti asthmatic powder."

CARBOLIC ACID IN PERTUSSIS.

Mr. A. McDonald says, in the *Edinburgh Medical Journal*, that after an extended trial he finds carbolic acid, in doses of one-fourth minim to a child of six months, one-half minim for a year, and one minim for two years and upward, to be the best remedy for whooping cough. The whoop goes; the vomiting ceases; the paroxysms are modified in intensity and frequency. This result he believes to arise from a similar action to that of creasote on the motor fibres of the vagus to the stomach, and from a lowering of the vitality of the specific germ of whooping-cough disease.

PILOCARPIN IN ALOPECIA.

Instances continue to be occasionally reported where the hypodermic injection of pilocarpin has led to a growth of hair on bald heads. In the *Journal de Méd. et Chirurg.*, Dr. André relates a case where in one month "the hair was sprouting freely."

PIAZZA'S FLUID IN NÆVI.

The composition of this caustic fluid is:—

R. Ferri chloridi, ʒ viiss
Sodii chloridi, ʒ iiiss
Aque destill., ʒ ij. M.

A single drop of this is injected by M. de Saint Germain into nœvi, and repeated at intervals of eight days. Each injection produces a small scar, and the operation is only complete when the whole surface of the nœvus has been transformed into a scar.

GONORRHOEAL RHEUMATISM.

A writer in an English contemporary recommends:—

R. Sodii salicylatis, ʒ iiss
Olei santali, ss
Tinct. acetæ racem., ij
Tinct. cardam. comp., j
Mucilaginis, ad ʒ viij. M.

Sig.—Half an ounce to be taken three times a day.

Interesting Case of Extra-Uterine Pregnancy.

M. Legendre presented, at the Société Anatomique, the autopsy of a patient who had succumbed in the service of M. Siredey. The patient entered the service in March, 1880, suffering from metrorrhagia and painful swelling of the abdomen; the uterus seemed augmented in volume, and the abdomen contained a tumor; the diagnosis was uncertain; the patient remained a month in the service without further augmentation in the abdominal tumor and then left the hospital for a period of two months. She then entered a second time for the same troubles, metrorrhagia and the tumor, which did not ap-

pear to have augmented in volume. The diagnosis interstitial fibroma was made, and the metrorrhagia ceased, ergotine being administered. During the month of August the tumor became much reduced in volume, but the patient was later on attacked with incoercible diarrhœa and vomiting, and succumbed in marasmus, November 11th. At the autopsy, the intestines, particularly the sigmoid flexure of the colon, were found united by adhesions with the intra-pelvic organs. In the midst of this mass, and communicating by a small opening with the sigmoid flexure of the colon, a tumor, which at first appeared cystic, was found. By careful dissection it was found that the two fallopian tubes communicated with this cyst. Finally, at the lower part of the cyst the bones of a fetus of about four months were discovered. There was intense inflammation of the rectum and colon below the point where the cyst communicated with the colon. Nothing had ever been found in the evacuations, even during the period of incoercible diarrhœa, to lead to the supposition that such a cyst was being evacuated into the bowel; the rapid diminution in volume in the tumor during the month of August was thus only accounted for at the autopsy.

Parenchymatous Injections of the Spleen.

The spleen is a very tolerant organ, and in India the ordinary native cure of an "ague cake" is to puncture it with a large stylet.

Dr. Hammond has recorded a case in which the spleen was punctured, partly for diagnostic and partly for therapeutical purposes; after the swelling had diminished in size he twice injected into the substance of the spleen 3.75 grains of extract of ergot. The result was a rapid diminution of the tumor.

J. Jæger reports (*Thèse Inaug., Strasbourg, 1880*) a number of similar cases. In some cases of splenic leukæmia the spleen was simply punctured, in the hope that, if its tissues were sufficiently deeply penetrated with a needle of considerable size, hemorrhagic infarction and subsequent atrophy would follow; the results did not fulfill this expectation, however. In one patient electro-puncture was practiced, without result. In another the injection of sclerotic acid was followed by death in about six hours; at the autopsy no trace of hemorrhagic infarction could be found, though the organ had been punctured fourteen times, and electro-puncture also had been practiced four times; there was only a reddish zone round one of the puncture marks. The author does not think that death

was due to poisoning by sclerotic acid, of which a decigram was used, but to the rapid absorption by the splenic vessels of the total quantity of liquid injected, the sudden increase of the mass of blood in the spleen aggravating all the symptoms, a shock which a patient weakened by long illness is not able to resist. The conclusion is thus indicated, that splenic enlargement due to leukæmia should not be injected.

The Origin of Milk Sickness.

A scientific contemporary gives an abstract of a paper by Prof. E. T. Cox, on the "Influence of Geology on Local Diseases," showing what has actually been done by rural drainage to eradicate the dreaded malady that used to prevail extensively in Kentucky and Indiana, known as "milk sickness," because, first attacking cattle, it was communicated to human beings through the milk, butter, and beef of the infected animals. At first it was supposed that the cattle had eaten some poisonous plant; but every suspected grass and weed proved harmless on scientific examination. Then it was held that mineral poisons must lurk in the springs and brooks; but hundreds of samples were analyzed without detecting the presence of the enemy. At last, an investigation of the clay shales, soft rocks formed from ancient mud beds, and which are microscopic in an eminent degree, revealed the secret. These formations abound in every infected locality, and it now seems clear that they exhale some sort of miasma, when saturated with water, that originated or aggravated the disease, just as other kinds of malaria bring on chills and fever. Proceeding on this discovery, thorough drainage of the wet lands adjacent to the shale beds dried them sufficiently to terminate the conditions favorable to the spread of milk sickness, and the disease disappeared.

Incubation in Disease.

In communicable diseases it is of great importance to ascertain the periods of incubation they present. This was discussed by Dr. Benj. W. Richardson, of London, in a recent address to the Sanitary Institute. He stated that there are twenty-six well known diseases of this kind, and they each have their special periods of incubation, which, though open to exceptions, are fairly regular. The period of incubation was that period which intervened between the introduction of the poison that caused the disease and the first manifestation of its effects. Diseases might be

grouped, according to their stages of incubation, into five classes—shortest, short, medium, long, longest. The shortest period was one to four days. Under this head came plague, cholera, etc. The second period was from two to six days, and under this head came scarlet fever, diphtheria, croup, erysipelas, whooping-cough, influenza, glanders, and pyæmia. The medium period was from four to eight days, and in it are included cow-pox and relapsing fever. The long period was ten to fifteen days, and included in it measles, mumps, typhus, and typhoid. The longest period, forty days, included syphilis, and might include hydrophobia. Dr. Richardson concluded his address by showing the important practical sanitary lessons that are connected with a correct knowledge of these periods of incubation.

The Transplantation of Bone.

At a late meeting of the Royal Society of Great Britain, Dr. MacEwen presented a paper on a case in which he had successfully transplanted bone. The patient was a child four years of age, who had lost two thirds of the shaft of the humerus by necrosis fifteen months previously, and in whom no osseous repair had occurred. The limb was, of course, useless. Dr. MacEwen proceeded first to make a groove in the soft tissues in the position of the bone, relying for this on his anatomical knowledge, and then placed in this groove small fragments of wedges of bone removed from other patients for curved tibiae. The result has been that a good new bone has been formed, the new portion has united firmly to the upper epiphysis and lower part of the original shaft, and the bone is only half an inch shorter than its fellow. Proper care was taken throughout to have the parts perfectly aseptic. Great interest attaches to this case, which is the first of the kind recorded.

The Use of Respirators.

In this country respirators are much less used than in Great Britain. Whether they are of much account is discussed by Dr. Thomas Hayden, in the *Dublin Medical Journal*. He is inclined to attach little value to those which cover the mouth—oral respirators. He thinks their main, if not only value, is as dust filters, and advises that they should be constructed of the finest wire-gauze, incapable of rusting, and without padding of any kind; they should be frequently cleansed by washing, or by soaking in water over-night, and accurately fitted to the nostrils

exclusively. The wearers should be strictly enjoined to breathe through the nose only.

Curability of Phthisis.

Such is the cheerful title of a work just issued by the eminent Prof. Jaccoud, of Paris (*Curabilité et traitement de la Phthisis pulmonaire*). He tells us that phthisis carries off 17.72 per cent. of all who die in Paris; that in that city, in the year 1878, not less than 8479 individuals fell victims to that terrible disease alone, which was at the rate of one hundred and sixty-one per week! If any epidemic had slaughtered that many, how loud the cry would have been! But as it was not a whit more fatal in 1878 than in any other year, nor in Paris than in London or Philadelphia, it excites no comment or alarm. Thus does custom make us all callous.

Dr. Jaccoud describes the varieties of phthisis, tracing them nearly all to defective nutrition.

When it comes to treatment he is full of details, passing in review all the usual remedies, and examining their indications and contra-indications.

On the question of climatic treatment he is especially rich, having himself visited and personally studied every health station of any importance in Europe.

The consoling reflection is left by his book, that consumption is a disease which is curable, and that taken in time, in a patient who has the will and the means to follow out the directions of his physician, the latter is generally master of the situation.

The Medicinal Value of Mistletoe.

The authors of the *National Dispensatory* dismissed the mistletoe as an obsolete remedial agent, of uncertain action and doubtful virtues. Dr. R. Lee Payne, Jr., has submitted it to a searching physiological and clinical investigation, and has reached a very different conclusion (*North Carolina Medical Journal*, May, 1881). His observations lead him to maintain that in those cases of post-partum hemorrhage in which the loss of blood has been extreme and the nervous shock so severe that we dare not give ergot lest paralysis of the heart result, mistletoe, from its stimulant action on the heart, may be given with greater safety and with even more confidence as to relief of the flooding, than ergot. Again, in retained placenta of abortion, at once so annoying to the physician and dangerous to the patient, mistletoe will be found a most efficient remedy. Further, from its stimulation of the

vaso-motor nerves and consequent contraction of the arterioles, it will do good service in cases of menorrhagia, metrorrhagia and hæmoptysis. Its action on the heart indicates its usefulness in all diseases of this organ characterized by weak action and low arterial tension. And finally, diseases of the brain and spinal cord, especially those in which congestion is marked, we may expect to be benefited from its exhibition. Dr. Payne's carefully prepared article certainly merits the attention of readers.

SPECIAL REPORTS.

NO. XII.—ANTISEPTICS.

(Concluded from page 23.)

Turning now to special antiseptics, we naturally name first

Carbolic Acid.

It may be well to give its solubility, from a recent writer.

Acid Carbolic, soluble in	1 in 20, cold water.
	5 in 1, alcohol.
	3 in 1, chloroform.
	4 in 1, ether.
	1 in 1, glycerin.

An antiseptic powder with carbolic acid is prepared by P. Bruno, by melting together rosin, \mathfrak{z} ij with stearin, \mathfrak{z} ss, and adding to the cooling but still liquid mixture carbolic acid, \mathfrak{z} vj, which is to be carefully triturated with libiss of precipitated calcium carbonate, until a uniform powder is obtained.

Carbolic Acid in Facial Erysipelas.

Dr. ROTHE observes (*Betz. Memorabilien*, 1880, No. 9) that however efficacious the subcutaneous injection of carbolic acid proves in arresting the course of erysipelas, it is not suitable when the face is the part attacked, for not only does it give rise to considerable pain, but induces a swollen and painful condition of the periphery. For some years past he has been in the habit of using the following application:—

R.	Acid carbolic,	
	Sp. vini,	āā
	Ol. terebinth,	one part
	Tinct. iodine,	two parts
	Glycerine,	one part
		five parts,

pencil the inflamed skin and its vicinity with it every two hours. No pain or sense of burning is produced, and the skin is usually next day pale and wrinkled. The further progress of the disease is more effectually arrested than by any other remedy, any new patches being rapidly effaced, so that in three or four days the facial erysipelas is usually at an end. The penciled places should be covered by a very thin layer of

wadding. When febrile action is present the ordinary internal measures must also be resorted to.

Phenol.

This purified form of carbolic acid is generally to be preferred. At a meeting of the St. Louis Medical Society, reported in the *St. Louis Med. and Surg. Journal*, Nov. 1880, Dr. CARSON presented a specimen of pure phenol, which he said they had adopted altogether in cases of antiseptic surgery, at least where Lister's method is practiced. It is recommended by Lister himself. It is less irritating, and on account of the odor, not so disagreeable as our ordinary carbolic acid. It causes a little tingling of the ends of the fingers after they have been in the solution for some time, though not nearly so decidedly marked as ordinary carbolic acid. It is expensive, costing four dollars per pound, and it requires considerable time, four or five months, to procure it from the manufacturers.

The Chlorophenols.

These are said to promise admirably. Their history is as follows:—

M. DIANIX, as reported at the annual meeting of the Russian naturalists, held at St. Petersburg, January, 1880, found that on mixing solutions of phenol and "chloride of lime" a reaction at once set in, and the chief product was trichlorophenol. This compound was also found to arrest fermentation in a much greater degree than phenol itself, and the mixture above mentioned was therefore recommended by him as much better suited for application to sloughing wounds than phenol itself.

The matter has since been more thoroughly studied by C. O. CECIL. In the *Journal für praktische Chemie* (October 18th, 1880), he points out the advantage of using chlorophenol instead of phenol in dressing wounds in a state of suppuration. It has been constantly noticed that wounds treated with carbolic acid alone do not heal so quickly as when a mixture of carbolic acid and chloride of lime is employed, and M. P. DIAMIN found that when carbolic acid and chloride of lime were brought together a chemical change takes place, mono-, di-, and trichlorophenol being formed, and that from the resulting lime and chlorophenol mixture the chlorophenols can be separated out by adding some strong acid, and by distilling with water. The author does not consider this method practically available. The best and cheapest way of getting a mixture of chlorophenols suitable for dressing wounds he found to consist in decomposing carbolic acid with chlorine gas, a somewhat expensive method, but

at present the best known. The price of such a chlorophenol is at present \$1.25 per lb. The chlorophenol mixture contains all three chlorophenols, but consists essentially of trichlorophenol, which latter is the chief disinfecting agent. The chlorophenol mixture is a blood-red crystalline mass of a peculiar penetrating odor and bitter taste. It is easily soluble in alcohol and ether, and is, in its topical effects, far less cauterizing than carbolic acid. By repeatedly pressing the red crystalline magma between blotting-paper, and crystallizing from ether, dazzling white prismatic needles are obtained, which, upon adding water to their alcoholic solution, precipitate in flocks. This precipitate is dissolved in alcohol, and the bandages impregnated with the solution. The author thinks that trichlorophenol will ultimately supersede carbolic acid in dressing wounds, and as an antiseptic agent.

Salicylic Acid.

This antiseptic cannot be said to have gained very much in favor. Its use as an anti-ferment is believed to be injurious. At least, quite recently, the French Minister of Commerce has issued a circular to the prefects instructing them to forbid the sale of any article of food, solid or liquid, containing salicylic acid, or any compound of it. The attention of the sanitary authorities has been called to the danger to public health by the use made of this substance for the preservation of food, and M. Tirard, has had a thorough analysis of its properties made by the Consultative Committee of Hygiene. The result of the committee's examination is, that the acid is injurious to health, not only on account of its direct effects on the system, but also indirectly by permitting the fraudulent introduction into food of other "deleterious, or at least unwholesome substances."

Salicylated Starch,

Recommended by Dr. Kersch, in eczema, is prepared by adding pure starch in small portions to a rather larger quantity of a two or three per cent. solution of salicylic acid in alcohol, agitating well after each addition. The excess of liquid is decanted, the starchy mass enclosed in muslin, well pressed, rubbed into powder and dried at about 80° C. A similar intimate mixture of salicylic acid with starch cannot be prepared by even long-continued trituration of the two substances.

Salicylol.

This is salicylic anhydride, and has been extolled in a late pamphlet by M. PIERRE APÉRY. When salicylic acid first came into notice, in 1875,

the author was led, by its relation to salicylol, to investigate the antiseptic properties of the latter substance. These were found to be surprisingly great. One striking experiment may be quoted. The dead body of a snake, already well advanced in putrefaction, was plunged into a solution of salicylic acid. The putrefaction continued, but was arrested almost instantly on the addition of a few drops of salicylol. The great cost of the substance has prevented experiments on a large scale, but it is hoped that some means of producing it cheaply may be devised.

Menthol.

This crystalline solid, derived from oil of peppermint, was brought forward last year, in Edinburgh, as an antiseptic and anti-neuralgic. At present it is too costly for use for the former purpose.

Eugenol.

The antiseptic properties of oil of cloves and oil of peppermint have long been known, since they have often been employed to prevent starch, etc., from becoming mouldy. They have also been employed as remedies for toothache. Eugenol, which is extracted from these oils, and which is also known as eugenic or caryophyllic acid, is found to have similar powerful antiseptic properties. It has a formula, $C_{10}H_{12}O_2$.

Thymol.

Thymol-vaseline ointment is made by dissolving twenty grains of thymol in one ounce of vaseline. It is useful in eczema and as a parasiticide. It is said that thymol has the property of immediately removing the smell of tobacco.—(*Phil. Med. Times*, October 23.)

Alumina Salts.

A solution of acetate of alumina has been highly recommended in Germany, both as an active disinfectant and a cheap one. What is called *chloralum* appears to be simply a solution of chloride of aluminum, and has the specific gravity of 1.244. (For analyses see *Amer. Jour. Phar.*, 1872, p. 268 and 397.) An imitation of it can be made by mixing alumina with about twice its bulk of water, and dissolving this base in strong muriatic acid, by the aid of heat, in a capsule, and continuing the evaporation until any excess of uncombined hydrochloric acid is driven off; when cool, dilute the solution with sufficient water to reduce the specific gravity to 1.244 at 80° F. Should any deposit occur before adding the water the solution should be first filtered through cotton.

Eucalyptol.

The experiment of Schultz in 1879 (*Centralblatt für Chirurgie*, No. 4) apparently demon-

strated that oil of eucalyptus is preferable, in the Listerian manœuvres, to carbolic acid. The latter prevents the development of bacteria in a solution of 1:200, while the oil in a solution of 1:666, in this respect being more than three times as strong as the former. Moreover, it smells pleasant, is readily dissolved in alcohol, other oils and paraffin, and is so harmless withal that more than a drachm of it (5 grams) was taken internally without any unpleasant effect.

Terebene.

At one of the recent meetings of the Cambridge, England, Medical Society, Mr. Stear advocated the use of a mixture of terebene and olive oil, in preference to carbolized oil, as an application to wounds, and more especially in cases of cancer and other foul-smelling sores. It was hardly inferior to carbolic acid as a disinfectant and deodorizer, and it had the advantage of being non-poisonous, of possessing an ozonizing property, and of being pleasant to the smell.

Alcohol.

The value of alcohol as an antiseptic dressing is apt to be overlooked. Dr. J. L. SUESSEROTT calls attention to it in the *Med. Times*, Dec. 4th. He says:—

A decade of years, through which I have used the article in question very many times, has not in the least abated my admiration for and confidence in it. Within this month I treated a pulpified wound on the top of the head of a man of over forty years of age, which at first presented the most unfavorable appearance, as it had been inflicted by a blow with an axe-handle in the hands of a strong young man, with no other dressing than whisky, and as a result had the parts to heal without any suppurating, sloughing, or the least tendency to erysipelas. The injury was inflicted on election day, November 2d, and its severity upon the nervous centres was so great, that, notwithstanding the entire repair of the scalp, at this writing, November 25th, the entire right side of the patient is very much benumbed, and untoward brain troubles may yet be encountered.

Nitrite of Amyl.

In the *Lyon Medical* it is stated that Dr. WEISER has discovered that nitrite of amyl exerts a remarkable disinfecting influence upon the urine; and he has employed it in the treatment of vesical catarrh. Three drops of nitrite of amyl in thirty c.c. of lukewarm water were injected into the bladder twice a day. For the disinfection and preservation of urine, nitrite of amyl is preferable to the use of carbolic acid, as the albumen tests are not thereby interfered with.

Resorcin.

This appears to be a quite important addition to antiseptic substances. An excellent history and

description of it, by Mr. Fred. B. Power, may be found in the *American Journal of Pharmacy* for May. Resorcin is a diatomic phenol, extracted from certain plants, as assafoetida, and produced synthetically by the action of potash on chlorophenyl sulphuric acid. It is a colorless, crystalline substance, of a sweetish and harsh taste, soluble in something more than its own weight of water, also soluble in ether and alcohol. It was first obtained, in 1864, by fusing galbanum resin with potash, the result being about six per cent. It has since been made from other resins and in other ways. A pamphlet on it has been written by Dr. J. Andeer, of Wurzburg. He found that a one per cent. solution prevented the decomposition of urine for months, and also destroyed the organic causes of putrefaction; it preserved pancreas and blood perfectly, retaining even their natural odors. Wounds treated by it healed by first intention, and those poisoned by septic material yielded to it as completely as to carbolic acid. Applied dry to the skin it is not absorbed, and is not irritating; hypodermically a two per cent. solution may produce painful cramps and twitchings, but never abscess. On the moist lips it will raise a white blister. Used with the atomizer it is entirely unirritating to either eyes or lungs, and nearly free from odor. Applied to granulations the crystals are a painless and mild caustic.

M. DUJARDIN BEAUMETZ has made use of resorcin for external application in the treatment of the worst kind of wounds, as syphilitic ulcerations and vaginitis, and the results which he has obtained have been most satisfactory. He has been less satisfied with the action of resorcin in gastric catarrh. He has, however, utilized this substance as an internal application, in two-gram doses daily, though without any decided result.

For exhibition in the fluid form the best vehicles are alcohol, glycerin and syrup of orange, but it is preferably administered in powder inclosed in wafers or gelatin capsules, whereby its peculiar taste is completely masked.

It is stated that the following formula can be recommended:—

R.	Resorcini puri,	gr. viij	
	Aque destillat.,	℥ iij	
	Syrupi aurantii,	℥ j.	M.

SIG.—A tablespoonful every two hours.

For an emulsion:—

R.	Resorcini puri,	gr. viij	
	Amygdalæ dulcis,	℥ v	
	Syrupi aurantii,	℥ j.	M.

Ft. emulsio.

SIG.—A teaspoonful every two hours.

The spray should be made thus:—

R. Resorcini puri,	grs. xviii	M.
Aquæ destillat.,	$\frac{3}{4}$ viij.	

Prof. SADTLER, before a late meeting of the Philadelphia Pharmaceutical Society, called attention to the fact that at a previous pharmaceutical meeting (see *Amer. Jour. Pharm.*, 1879, p. 276) he had explained the formulas of resorcin, resorcin phthalein (fluorescein), phenol-phthalein, of tetrabromfluorescein (eosin) and of uranin; also that the antiseptic characters of resorcin alluded to by Dr. Power might have its explanation in the character of it as a diatomic phenol; that, taking the monatomic phenols, carbolic acid, cresol, thymol and carvacrol, the derived phenols contained in creasote, the diatomic phenol resorcin, the triatomic phenol pyrogallol, or pyrogallic acid, and the half phenol salicylic acid, we had a series of bodies all possessing the antiseptic properties in a more or less marked degree. Three of these were thoroughly recognized in this connection, viz., carbolic acid, salicylic acid, and thymol, and it seemed probable that all would prove efficient.

In WURTZ's *Dictionnaire de Chimie*, Tome II, the bibliography of resorcin is quoted very fully, and a writer in the *Chemist and Druggist*, thinks that ANDER derived much of his knowledge from that source.

Picric Acid.

Prof. CHÉRON has pointed out that picric acid is a very powerful antiseptic. It has been employed at Saint Lazare, for the disinfection of latrines, and it was found that the fecal odor was readily removed by it. It also prevents the putrefaction of urine, and is said to be a useful application to wounds. The potash salt has been given as a febrifuge, with good effect, by BRACONNOT. Dr. WAINWRIGHT, of New Jersey, has treated malarial fevers with success by picrate of ammonium. He has given it as a pill in doses of a grain, or a grain and a half, increasing it to two grains.

CORRESPONDENCE.

The Sanitary Condition of Our Seashore Health Resorts.

ED. MED. AND SURG. REPORTER:—

Considering the enormous increase of travel in summer, to all the popular seaside resorts, thoughtful physicians are becoming solicitous as to their drainage system, and other sanitary arrangements. I cannot speak from personal knowledge of other places, except as an occasional visitor, but with regard to Atlantic City, I am in a position to state, for the information of

the profession, exactly what has been done, and is now being done, toward preserving the air uncontaminated.

It is in the highest degree important that persons who leave the city for the good of their health should go where they may be exposed to healthful influences, and none other. Physicians, therefore, ought to inquire most carefully into the condition and sanitary systems of the various resorts in the country, or at the shore, to which their patients are sent for the summer months. Delicate invalids may escape from the foul-smelling and insidiously destructive sewer gas of the large cities, only to be stricken down by the malarial poison which lurks in the shady bowers of many an alluring country place, or lies in ambush along the banks of those placid rivers which are so attractive to many health and pleasure seekers.

The sandy beaches on the New Jersey coast are generally free from malaria, except at points where fresh water streams empty into the ocean. Professor Alfred L. Loomis, of New York, in a recent lecture, discussed the subject of malaria, with his accustomed ability. He said: "Salt water marshes are, as a rule, especially free from malaria, but mix salt and fresh water, as on some of the New Jersey marshes, and you have the conditions for generating the poison. Marshes that rest on a substratum of sand are not so malarial as those that rest on limestone, clay, or mud."

Atlantic City, which, by reason of its rapid growth and prominence among health resorts, is now attracting to an unusual degree the critical attention of sanitarians, is fortunate in being surrounded by a plenitude of unmixed salt water, and in being founded upon the driest of sand. So far, therefore, as concerns malaria, that subtle, intangible poison, which defies alike the microscope and the reagents of the chemist, but produces in some unknown way the periodical fevers, Atlantic city seems to be highly favored. Intermittent and remittent are strangers to the regular residents, and it is the constant experience of malarial patients coming here that they obtain rapid relief with far less medication than at home, often, especially in the case of children, with no medication at all.

But the towns built upon the flat beaches of the sea coast, however exempt naturally from marsh miasm or malarial poison, have to overcome certain difficulties in solving the problem how safely to remove their garbage, kitchen slops, and night soil. Some of the largest of these towns have streams of water running through them, into which they empty their sewage. This is manifestly objectionable; such streams thus becoming open sewers, and most offensive and dangerous to health in the hot season, even if they did not deposit their foul burdens into the sea in the vicinity of the bathing grounds.

Atlantic City early hit upon the right system for such places—that of carting entirely away from the town all refuse matters—but until the present year, has never carried this system out with sufficient thoroughness or with suitable precautions. Now, for the first time, we have a thoroughly organized, energetic and determined Board of Health, with the ability to understand

what is needed, with ample powers to enforce compliance with its regulations, and with courage to prosecute its labors, notwithstanding occasional opposition. The president of this Board, and real originator of the plans it is carrying into effect, is Dr. F. B. Lippicott, an able and clear headed physician, formerly practicing at Burlington, and now proprietor of a hotel here.

Among the important improvements lately effected may be mentioned the following: There has been a general filling up of lots which were below the city grade. A most stringent contract has been made for the removal of garbage, at least once a day, in sealed or closely covered wagons, from every hotel and dwelling house in town, and its transportation by rail back into the country, where it is used for fertilizing purposes. All privy wells are required to be cleaned at stated intervals, and the contents removed in odorless excavators, and these latter appliances are already here in use. A health inspector has been appointed, whose duty it is, under the supervision of the Board, to watch closely that the contractors do their work properly, and keep their wagons and other apparatus free from offensive smells. He is also required to keep a sharp lookout for nuisances, and to assist the Board in inspecting any premises that may be complained of as in an unhygienic condition. Whenever two citizens make such a complaint the Board is required to take cognizance of it, and this is now promptly done. Heavy fines have been imposed, in several instances lately, for deviations from the stringent regulations of the Board—in fact, for doing what was considered quite permissible only two years ago.

A few words may be said as to the drainage of Atlantic City. There are now eight sewers, which run from the ocean side of Pacific avenue across the town and empty into a canal or ditch out on the meadows, which in turn empties into Absecon Inlet. This would be objectionable if the attempt were made to carry off by these sewers any animal refuse, or other offensive matters, such as that from water closets, or even kitchen-slops. Though they have a fall of from three to six inches in every one hundred feet, it would be impossible for them to remove such substances with sufficient rapidity and thoroughness; and even if they could, to pour such a quantity of offal into the ocean at our very doors would be most undesirable. Therefore, the sewers are used only to drain away the ordinary surface water, the refuse matters being removed as above described.

The system in use here, as now carried out, is believed to be the best attainable on the flat seaside beaches. If any sanitarian can suggest a better, the health authorities of Atlantic city would be pleased to hear from him.

There are many new towns springing up along the New Jersey coast, some of which are projecting elaborate plans of sewerage, while others are doing nothing, simply leaving all their animal refuse to decay on the premises and pollute the air. However, the strong sea-breezes which constantly fan all these beaches are laden with the powerfully antiseptic compounds of iodine and chlorine, so that hygienic laws may often be violated with impunity.

Another important consideration at these seaside resorts is the drinking water. At many places the surface water obtained by digging a few feet in the sand is habitually used for drinking and culinary purposes. This is decidedly unsafe. Intestinal fluxes, and even typhoid fever, may be produced in susceptible persons by using such water. The hotels, boarding houses and cottages in Atlantic city are supplied with cemented cisterns or wooden tanks for collecting rain water, and either the latter or melted ice is always obtainable; except at a few second-rate boarding houses, no other water is ever offered to guests. It is well enough that patients going to the shore should be cautioned as to this point.

There are other matters, especially those relating to personal hygiene, which need to be strongly enforced upon patients visiting the seashore; but this paper is already sufficiently extended.

BOARDMAN REED, M. D.

Atlantic City.

Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

The following case has some interest:—

October 5, 1863, I was called to attend Mrs. H., in labor. Patient, a healthy multipara, was in great mental distress. On inquiry I found the cause to be the fixed belief that her child would be deformed. She stated that, soon after conception, a young calf got its back hurt, and that she had doctored it for several weeks, since which scarcely a night had passed in which she had not, in her dreams, seen the wound in the calf's back. It was a shoulder presentation, and labor was terminated by podalic version. Sex, male, and perfectly formed; except a spina bifida, implicating the upper half of the sacral, and lower half of the lumbar regions. It died in convulsions the third day. Both parents and two or three older children of the family concurred in stating that the spina bifida was an exact counterpart of the wound she had so faithfully tried to cure the preceding spring.

San Diego, Cal.

F. R. MILLARD, M. D.

NEWS AND MISCELLANY.

The New York Medical Mission.

The New York "Medical Mission" was formally opened last week, at No. 5 East Broadway, Dr. Agnew presiding, and Rev. Dr. Taylor delivering the inaugural address. The object of the mission, as stated in a published circular, is "to reach that numerous class of poor persons, always to be found in a large city, who are generally inaccessible to the Gospel, by giving them gratuitous medical relief, and at the same time preaching the Gospel to them, thus linking together in the missionary physician, efforts to heal the body and to save the soul." The first medical mission in the United States was established in Philadelphia, two years ago, and the second at Chicago, about a year since, in charge of Mr. D. L. Moody. Among the board of managers of the New York institution are Mr. Cornelius Vanderbilt, Mr. Benj. C. Wetmore, and Robert Hoe, Jr.

The Adirondacks for Consumptives.

A writer in one of the daily papers warns against the overcrowding of phthisical patients in this resort. He writes:—

A mournful illustration of the cruel wrong which is done by spreading broadcast the delusion that persons in the last stages of consumption can be cured by a change of climate, is furnished by this year's experiences in the Adirondacks. The number of victims this season to an exaggerated belief in the curative properties of the Adirondack region has been unprecedented. Sixteen persons, during the present month, have died in the woods, or en route, and their bodies have been carried back through Platt-burg. All these died in want of the comforts and consolations which have surrounded them at home, and in many instances, no doubt, death was hastened by fatigue, deprivation and home sickness. And still the mournful procession to the woods goes on, and still people are found, well meaning or otherwise, who are willing to take the responsibility of stimulating a false hope.

Value of Swimming.

Some years ago a venerable member of the profession, now departed this life, wrote an able advocacy of swimming as a form of exercise, and published it in the *REPORTER*. We note that Mr. H. J. Barron, Secretary of the Swimming Association of Great Britain, writes to the *London Times* to urge the necessity of children being taught to swim "a good, straightforward breast stroke." In case a person falls into a heavy sea, a side-stroke should be adopted, presenting the back of the head to the dash of the waves. If, he says, a child is taught merely to "tread water," no doubt, after a few lessons he will support himself; but he will not be likely ever afterward to learn to swim with a good stroke. But if a child is taught the breast-stroke properly he will learn to support himself in fewer lessons, probably, and as he gains strength and confidence in succeeding years will practice and become efficient in a great variety of strokes.

U. S. Marine Hospital Service.

A circular containing the new arrangements for the care of seamen has just been issued by Supervising Surgeon-General Hamilton, of the U. S. Marine Hospital Service. It gives in detail the persons authorized to treat seamen on behalf of the government, the manner of treatment, the expense thereof, etc., etc. The following quotation covers the service at Philadelphia:—

"The medical attendance to be furnished by a medical officer of the Marine Hospital Service; the Jefferson Medical College Hospital to furnish board, nursing and medicine, at ninety cents per day, and to provide for the burial of deceased patients at \$10 each. Transportation from the Marine Hospital Office to the hospital to be furnished by the hospital authorities, when required."

QUERIES AND REPLIES.

Contagiousness of Gleet.

MR. EDITOR.—Please inform me, through the column of "Queries and Replies," whether, in your opinion, in a case of gleet of sixteen years' standing, the discharge is still inoculable, and a positive bar to marriage. By so doing you will greatly oblige,
Yours, respectfully,

T. R., M.D.

Ans.—We should not think the discharge contagious; but leading authorities are at variance on this question.

Purgation in Abortion.

MR. EDITOR.—What about the propriety of giving drastic purgatives in threatened abortion, consisting of calomel, leptandrin and podophyllin? Is it proper to give purgatives the next day, consisting of the same ingredients? Further, what about giving emetic doses of ipecacuanha when a patient has stomatitis, enteritis, colitis, peritonitis or pelvic cellulitis?

A YOUNG M.D.

Ans.—The rule is, when the abortion has progressed so far that, in the opinion of the physician, it cannot be checked, then it should be hastened; when it can be checked, of course, drastics are out of place. The last query is too vague.

MR. EDITOR.—Will you please inform us, through your "Queries and Replies," where we can obtain the "printed gummed address" of all the physicians and clergymen in the United States, or any one State we might select.

T. and B.

Ans.—Write to the Business Address Co., New York city.

MARRIAGES.

BRADFIELD—ELLWANGER.—In this city, on Thursday morning, June 16th, at the parsonage of the Arch Street M. E. Church, Seventeenth and Arch streets, by the Rev. O. H. Tiffany, D.D., Dr. G. Milton Bradfield and Louisa S. Ellwanger.

CRANE—EUCKARD.—June 3d, 1881, at Abington, Montgomery county, Pa., by Rev. J. R. Eckard, Charles L. Crane, M.D., of Sumter county, S. C., and Anna Maria, daughter of the officiating clergyman.

HANNA—SLAYMAKER.—At Lancaster, Pa., May 28th, 1881, by the Rev. James Y. Mitchell, D.D., Albert A. Hanna, M.D., of Maryland, and Mary E., daughter of the late Amos H. Slaymaker.

KITCHEN—CONSTANT.—On June 1st, at the residence of the bride's parents, by the Rev. R. S. MacArthur, Dr. J. M. W. Kitchen and Minnie E. Constant.

NICOLL—DELANY.—June 16th, 1881, at the residence of the bride's parents, by the Rev. Dr. M. W. Hamma, assisted by the Rev. Thos. A. Gill, United States Navy, Dr. S. B. Nicoll, of Shelter Island, and Mrs. Maggie A. Delany, of Brooklyn, N. Y.

PALMER—BANTA.—On Wednesday, June 15th, at the residence of the bride's parents, by the Rev. John A. Westervelt, Dr. Delos Palmer and Jennie, only daughter of Albert S. Banta, Esq.

SHIMWELL—BOWKER.—In this city, on the 14th ult., by the Rev. George F. Wiswell, D.D., at the residence of the bride's parents, Benjamin T. Shimwell, M.D., and Emily Bishop, daughter of Frederick Bowker, Esq.

WHITMARSH—GERST.—In Brooklyn, N. Y., June 16th, by the Rev. A. S. Graves, Henry A. Whitmarsh, M.D., of Providence, R. I., and Miss Martha M. Gerst, of Brooklyn.

WILHELM—FLORER.—At the residence of N. M. Florer, Esq., near Milford, Ohio, by the Rev. T. J. Melish, Dr. James Wilhelm and Miss Mary Florer.